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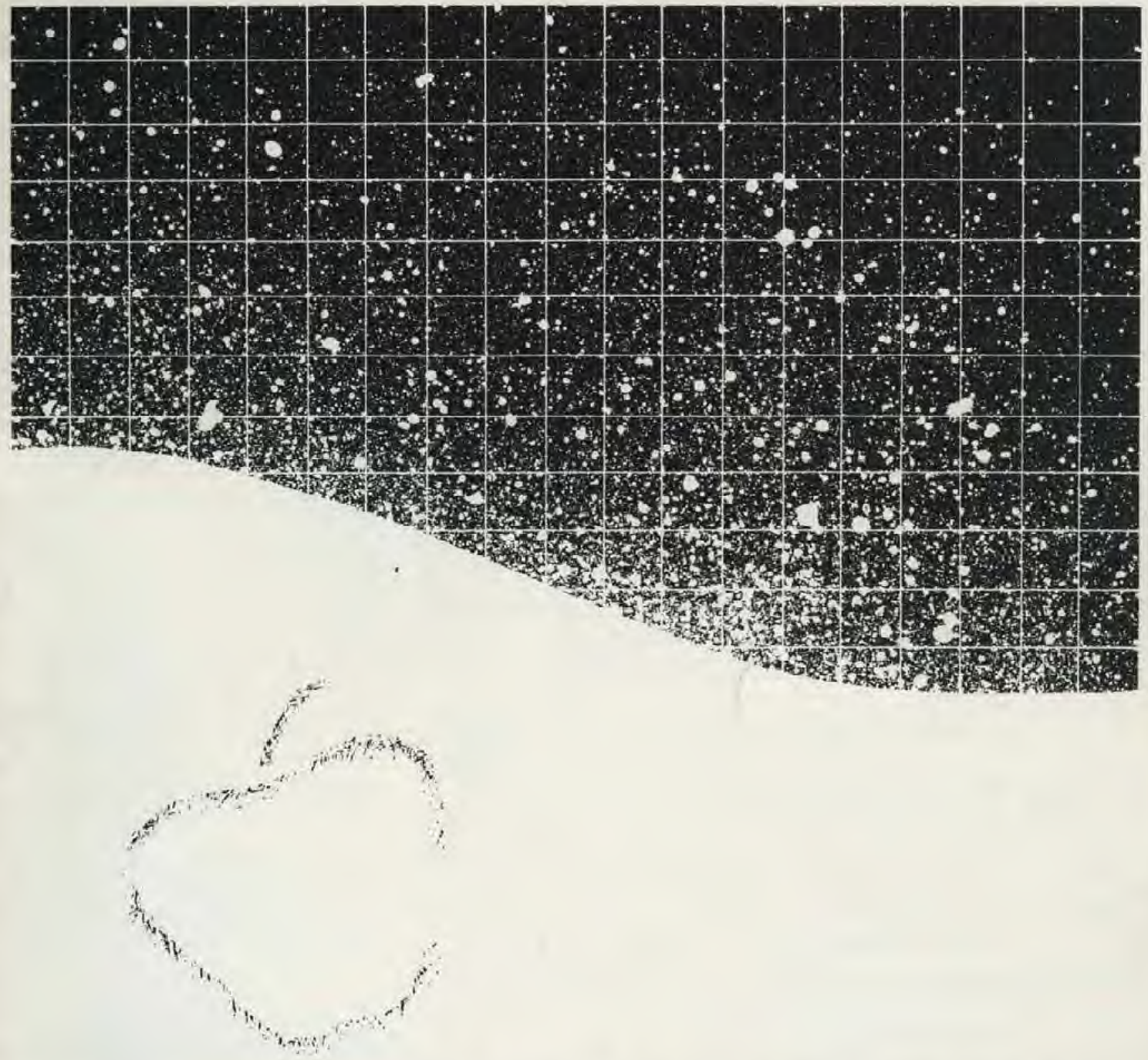
# hardcore

December 1985 Volume 5(6)



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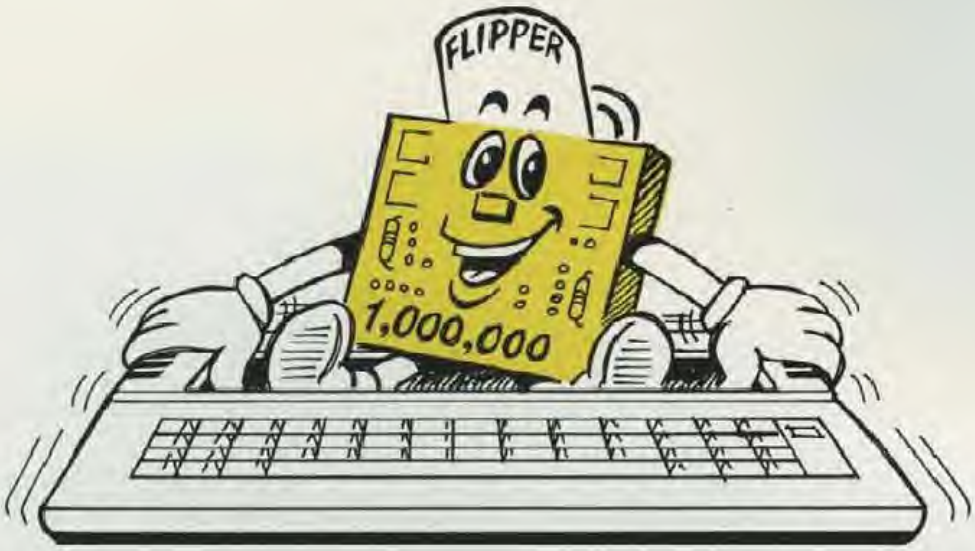


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# HARDCORE

The Journal of the British Apple Systems User Group
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The front cover and HARDCORE logo were designed by Stephen Mucha.

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The copy for this issue was prepared on a Macintosh, and the artwork prepared on Imagewriter and LaserWriter printers. The headings and other material were prepared on a CRTronic typesetter.

# EDITORIAL

I am glad you did not throw your new style Hardcore in the bin, you may have thought that it was just more junk mail.

The new size has been re-introduced after nearly two years to make it easier for a better quality journal to be produced. The method of production know and for the near future involves all manner of state - of - the - art processes.

Much of the material has been sent to me over the Force (BT Gold) and loaded directly into a Macintosh running MacTerminal. It is then put into Microsoft Word and formatted to the correct widths.

I print it on an Imagewriter in a 12 point font for editing . The spelling is checked and then it is printed in 9 point Helvetica (Laserwriter font) on the Imagewriter so that layout can be checked. Finally it is printed on a Laserwriter.

The whole thing takes time but I hope you all find the layout and type size easier to read. I would like comments from our readers, so that any mistakes may be corrected for the next issue. I also hope to be able to use more up-to-date software for the next issue.

After the Laserwriting is done it is all pasted up in the normal way - plenty of time and glue !

Our journal relies on the articles donated by the membership and therefore I ask all of you to submit articles for future issues. These can be on any related subject - you may have a special use for your Apple - or a useful method of using an application. We need tips, solutions to problems that you may encounter and we are very interested in articles about how YOU use your machine. Remember not everyone knows everything about the Apple - and your knowledge may help someone, somewhere.

We have introduced a system of reward for articles - this is on top of the fame you get !

I would like to take this opportunity to wish all our readers, contributors and advertisers:

A MERRY CHRISTMAS
AND
A HAPPY NEW YEAR

Jim Parkes

# CLUB NEWS

Welcome to the Club News Spot, this will be a regular article to keep you all up to date on what is happening and what is planned for the future.

We are hoping that we can get information to you all in plenty of time to allow you to attend at the various functions that we will be organising either nationally or through your local groups.

The first item is the **Apple Show 86** organised jointly by BASUG & Apple(UK). This show is the brain-child of a really keen member Ivan Knesovich, Ivan is hard at work making the 1st of March a really historic day for all club members.

The whole day is designed to give all Apple Users a day to remember. We are working on a very varied program of events including demonstrations, talks and hands-on-experience of many different aspects of Apple Computing. We intend to make sure that all areas are covered on both the Apple ][ and Macintosh range.

We will be inviting a very special person to this major event.

The event is by ticket only so therefore to avoid disappointment **BOOK NOW.**

Members with transport difficulties are asked to write now - we will if the demand warrants it arrange for coaches to take members to the show. Costs will depend on the numbers and distances involved.

Courses are now well advertised and to help us plan ahead we need your support and suggestions. As you can see from the advert elsewhere we have planned out some course which are run by a qualified lecturer to proper Commercial Standards at a fraction of the Commercial Cost. Members of BASUG are placed in an envious position at having **PRIORITY PLACES** on these courses.

The software library has new disks which cover both DOS and CPM, these disks are very good value and the quality has increased since the dark days when the library was first started.

Blank disk prices have been held for the near future, we offer the best price available by dealing direct with Memorex, we can also get superb rates for bulk purchases - so if your business needs DISKS why not write or Ring for a quote NOW.

**PRICES DOWN ON 3 1/2" DISKS**

Yes, we have managed to get even lower prices for Memorex 3 1/2" disks - they now cost £29.00 inclusive of V.A.T. & Postage and come packed in a plastic SEE10 box.
Order now whilst limited stocks last.

The FORCE is being updated to a better system which will make it faster and more interesting. BABBS has now the advantage of both a new operating system and a hard disk - both of these new features make it the best around at the present time.

The hotline will change from the 1st January 1986, please make sure that you record the new number - you never know when you will need help.

Special Release Software is still good value and we are at present looking at some new arrivals with a view to releasing them shortly. **WATCH HARDCORE** for news of these.

The committee are at present involved in the re-organisation of the membership system and hopefully we will be able to announce changes that will make it easier to manage.

*He gets his programs through the Mafia, you know.....*

# HARDCORE
# HELP — NEEDED

**Question - HOW CAN I BE FAMOUS EARN A FORTUNE AND BE HAPPY ?.**

**Answer - WRITE FOR HARDCORE.**

Yes, you can be famous - over 1000 people will read your words - you can earn a fortune if someone likes what they read and hires you - you can be happy knowing you have made me happy.

Well now I have come down to earth from having my mid-morning dream, I should get back to real-time thinking, like why I am unable to get rid of the £50 worth of disks for contributions by the membership. Not that I don't want too but how can I judge articles that have not been sent in ?

**Question: WHAT DO YOU NEED FOR HARDCORE ?**

**Answer: Any article on Apple related subjects**

Including - What you use it for, what software you use and how, what bugs you have found, hints, tips, questions, answers, listings, in fact anything about any Apple related subject.

**Question: WHAT STANDARD DO YOU EXPECT ?**

**Answer: We do not expect PULTZER PRIZE winners -**

We will accept any reasonable article, the spelling and grammar can be sorted out.

**Question: HOW DO I SEND MY MASTERPIECE ?**

**Answer: By using the following methods:**

1. Apple ][ - III - Mac format disks using any text editor or word processor generally available on the machines. (inc CP/M)
2. Via The FORCE or BABBS 1. Please ensure [C/R] are placed properly. Lines should be between 40 and 80 characters long.
3. By letter - typed, printed or neat handwriting. Please try and double-space these articles for easy reading.

**• All items should be sent via the P.O.Box**

**Question: NOW I HAVE SENT MY 100 PAGE NOVEL, WHATS IN IT FOR ME ?**

**Answer: Not a lot -**

You could be lucky and get up to a box of disks for your trouble - you could have a big publisher read your article and offer you a life time job of writing novels for pensioned off computer personal.

**SO LETS ALL WRITE AN ARTICLE, LETTER, TIP FOR OUR JOURNAL AND MAKE IT THE BEST.**

## Help Required

**Contact required:-** Mr F.Warren would like to meet anyone with an Apple ][+ in the Euston arear of London with a view to exchanging ideas. Please contact on :- [illegible]


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# COMMITTEE CORNER

**HARDCORE.**
**THE NEW LOOK - THE FUTURE.**

I hope, like me, you had to pick yourself up off the floor in amazement after seeing the fantastic 'newlook' Hardcore.
Why make all these improvements to the trusty old magazine? I think I had better explain a few things ....

Those of you that have been reading all the small print over the last year, especially that in the annual report, will have realised that BASUG was not in a financially healthy position this time a year ago.

The committee, have had to swallow hard and look at the rather dire situation that had arisen over the previous years.

The lead was set by our chairman of the time, Quentin Reidford, and following the trend in the outside world, we had to make some cuts. Some of these hurt in various quarters, but with the re-organisation of the administration, and the shouldering of various tasks by the committee, we began to see a reversal of our fortunes.

Irene Flaxman, the treasurer, has mentioned these in her 'mid-term' report.

The one remaining large expenditure left was Hardcore itself.

On top of the printing and distribution costs, the editor was paid the advertising revenue to produce the magazine, it was decided that the expense of this method, was a luxury that could no longer be afforded.

Happily this coincided with the editor himself deciding that he might give up the job of editing the magazine after the October issue.

As a result of the financial situation, we have had to look carefully at what we now do with your subscription, and any income we make from sales to you.

First and foremost, BASUG is a 'club', and exists to help its members. In fact we are a limited company, this was done some time ago to regularise what had become a rather large organisation, and to faciliate all the paperwork and other offical things that went in train with such an undertaking.

BASUG as the committee see it, is there solely for the benefit of its members. We are a self-help organisation, though of course your elected committee, spearhead the whole operation.

We think that what you get from BASUG should be at the least some or all of the following:

1. A magazine that covers the whole Apple spectrum, Apple II, II+, //e, //c, III, MAC, ITT2020, Franklin etc. etc.

2. A magazine that is interesting, informative, controversial and value for money.

3. Feedback with answers to your problems, through Hardcore, the Hotline, BABBS1, the Force, local meetings, regional meetings etc.

4. A supply of discs and consumables at competitive prices.

5. Short courses organised in the various aspects of all the machines and programs, to further your expertise and knowledge.

6. A good software library, both of public domain and Special Release discs in both 5 1/4 and 3 1/2 inch formats.

This is the bones of the operation, with the committee making the whole thing tick, the flesh is put on by you. After all someone has to write the articles for Hardcore, the regular contributors have only so many articles in them.

The local meetings need you to attend, as you help one member, he is helping you.

BASUG can attend the shows, only if you attend and help us by buying disks and other things from us.

You can help by getting your friends to join. We can expand the facilities we give you, only if you use the ones that are already there and so help us expand in to new ventures.

Oh dear, I digressed, we were talking about the 'newlook' Hardcore. Well you see, the committee, having seen the financial situation become stable, and having decided that the production of Hardcore should be changed, made one more decision.

You see the magazine is the one thing that you all have in common, those living in the north of Scotland probably never see another member. So you deserved better for your subscription, but how could we do this, and save money at the same time.....
Enter 'FatMac', a new page size and layout, and two sets of fingers covered in glue.

Up till now, we had produced Hardcore using a daisy-wheel printer and reducing the final copy to A5. This was satisfactory, but did not do justice to the new means that Apple have put at our disposal through the MAC the IMAGEWRITER and the LASERWRITER.

First we raised the page size to that of a proper magazine, A4. Next we took all the text files generated all over the country by Applewriter et al. and uploaded them to the FORCE. This saved the envelope and postage
(ED. but what about the phone costs ...).

Jim Panks pulled out his trusty 'FatMac', downloaded the files, and taking MS-WORD/MACPAINT etc. molded all the copy and pictures into the sparkling new pages.

Then he LASERWRITER'ed most of the pages, some he IMAGEWRITER'ed, and finally he and Graham Attwood got the glue pot out, and pasted it all up.

I hope you agree it has been worth it, the new magazine is exciting to look at, we hope this will draw more advertising, which will make Hardcore bigger and even better next time round ... look out Apple User ...

However, we have still a small problem, we need someone to produce the magazine, all for the love of it, just as the committee is doing now. You see, Jim and Graham, are getting a bit stuck up, with glue that is, and need help.

We are committed to producing a magazine of quality for you. We need help, to produce it, and to write articles.

We **need you**, and you **need us**. Remember, BASUG is a self-help organisation, you can only get out of it what you put in to it.....

**THE COMMITTEE IS WORKING FOR YOU**

# TIPS

From Roger Deacon-Smith comes this useful information:-

I tend to create many text files on a daily basis and use the date as part of the filename to aid identification. I am also lazy and , in order to save myself the effort of typing the date several times each day I use this routine to 'poke' the date into the Apple's memory.

```
0 GOTO 100
20 GOSUB 22: PRINT "WHAT IS THE DATE ? <" ; DT$ ; " >" ; : INPUT A$
21 IF A$ < > " " THEN DT$ = A$: GOSUB 24 : RETURN
22 LD= PEEK (919) : IF LD < 6 OR LD > 8 THEN LD = 0: DT$ = " " ; RETURN
23 DT$ = "":FOR C = 1 TO LD : DT$ = DT$ + CHR$ (PEEK (919 + C)) : NEXT : RETURN
24 LD + LEN (DT$) : POKE 919,LD: FOR C = 1 TO LD: POKE 919+C, ASC (MID$ (DT$ , C ,1 )) : NEXT : RETURN
100 GOSUB 20: REM GET DATE ROUTINE
```

I have used this location because it appears to be unaffected by the booting of DOS and also still frees most of the space in the area from $300 - $3DO which is commonly used for short machine code routines.
The date is returned as DT$ and the only criteria to be fufilled is that length of DT$ should be from 6 to 8 characters (to cover the range ie 1/1/85 to 31/12/85) but this is readily changed to suit different date formats.

Thanks Roger - **Another Good idea.**

- - - - - - - - - - - - - -

Try this listing - it may protect your programmes as well as provide a little amusement and frustration to somebody trying to run a disk or catalog your disk.

```
10 REM GREETING - 16 PROGRAM
20 POKE 1010, (255)
30 POKE 1011, (105)
40 TEXT:HOME
50 VTAB 10
60 INPUT ".....";W$
70 D$=CHR$ (4)
75 REM INSERT YOUR SECRET CODE ON NEXT LINE
80 IF W$= "YOUR SECRET CODE" THEN PRINT D$;"RUN (PROGRAM NAME OR CATALOG)
90 PRINT D$;"RUN HELLO"
100 END
```

Now save the program as HELLO and see what happens.....

# APPLE ][:

# IS THERE AN AFTER-LIFE?

David Wilshere

There was an attempt at the 1985 AGM to study the future possibilities for the Apple ][ range - at least, it got on the programme but somehow it never really got discussed. So I felt someone should raise a few questions here. What are the 2 million owners going to do about their Apples ? And before you can think about that, you too ask why anyone bought an Apple in the first place.

Living, as I do, in Europe away from disturbances in Britain, we read that one in ten families own a personal computer there. What do these people do with them ? There is simply nothing like that here. Apart from the fact that we don't part with our money without a good idea of what we are getting, there is also the supply side. Prices are much higher than in the U.K. or in Germany.

I feel that people quickly discover that "getting in on the computer act" is a totally meaningless phrase. The darn things don't work when you wind them up ; you have to do lots more. This suggests to me that many people of those one-in-ten (or whatever the meaningless figure really is by now) are sitting quietly in the cupboard, like the train sets and the Lego. But Apple ][ 's are not BBCs or Spectrums : they cost more and they have no 'school-imperitive' so the kids have to be really in it to justify the difference. Sinclairs and BBCs had their day here too, while kids (mainly boys, they were rougher) played games and tried things out.

I bought my Apple in 1981 so as to try out various stock market ploys which were available in the U.S.A. and it took me a few years and much intense work to discover that most of my efforts were wasted. You just can't check out traded options that way (and if you don't know what I'm talking about, you must have bought your Apple for another reason) and the stock market operates rather differently.

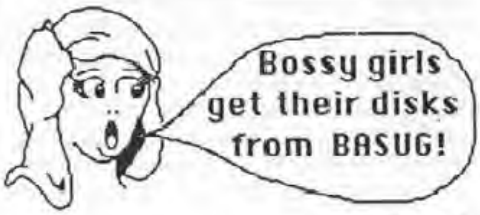
But it taught me quite a lot about my hobby. And now I use it for a lot of correspondence in French and English as well as a number of educational activities - like trying to learn how computers work.

A number of people I know use Apples for correspondence, others for teaching children the piano, drawing pictures and so on. The friend who helped me the most early on has changed his ][+ for a ][e and I'll never know why. Others have bought a Mac as well but I still don't know what to do. We use Visicalc and all that stuff, but I have Lotus 1-2-3 in the office (HP-150) and that's nicer. The September issue of Apple User talks of coming upgrades for Apple ][e/c owners (at an unknown price) and nothing at all about the ][+ owners. The latter must still be quite a big market (witness the adverts in the American technical papers) and together they may well make a set of markets - people who use ][ 's in general office work, people who don't. It seems to me that those of us in the second category have one thing in common: we bought our Apple to do different things and are now satisfied or not, unlikely to buy much more unless our arm is twisted pretty hard. The February 1985 issue of Personal Computing (USA) starts with a picture of the ][e with a screen remark "Reports of my death are greatly exaggerated." Charles Rubin in "The Life & Death of the Apple][" in that issue remarks that Apple management in 1980 "roundly shunned it's Apple ][ and went for the ill-fated III".

But no one seems to have remarked in the two big markets that I see; there are a number of ][+s that I see each week still controlling instruments in laboratories very effectively and much more effectively than quite a lot of the luxury competition. The other part I see is the one I belong to. I bought the thing for a reason I quoted above (and others) and I don't intend to replace it unless it falls to bits or until someone makes me an interesting offer to upgrade.

I also suspect that other people have come this way and have decided to use their Apple as a means to learn, having failed to find what else to do with it - the average owner perhaps having less correspondence than I and a range of different interests. After all, you can't stick a disappointed Apple in a wardrobe - there just ain't room ! This is my secret conclusion as to the present location of all those old Sinclairs and BBC's which confused the Great British Population - those who could find no use for their new toys and when the children left school what do you do with the things ? It is not my experience that the British are particularly computer - literate, so there has to be another reason if my observation is right.

Continued on page 11



# CLOSE ENCOUNTERS OF THE MICRO KIND

Tom Wright

I am employed within the Austin-Rover group as an industrial Engineer and have them to thank for my introduction to the Apple ][ microcomputer. Specific details of our computer applications are beyond the scope of this article, but one individuals personal experience of the 'Hello Apple' process may interest you.

As a computer user working in a flow-line based manufacturing industry my demands on software are based on very simple premises :
1 • Immediate availability.
2 • Easy to understand and remember.
3 • Fast in operation.
4 • Versatile.

I use the term 'computer user' in a qualified manner since I am not required to be a computer operator or programmer, just to use whatever produces the best results in the shortest possible time. With the exception of item (1) the premises outlined above are not ranked in any particular order because, dependent on any given situation, their order of priority can change.

My first encounter with micro's began with a number of cardboard boxes being deposited in my office accompanied by exhaustive description of their contents "it's an Apple computer mate !". I opened those boxes that evening connected the various wires and cables as instructed by the books of words, and then discovered Visicalc. These events occurred in the now dim and distant past (I think it was September, 1982), the simultaneous arrival of the Apple and Visicalc proving to be the biggest single event in my working life in terms of aids to improving my work capacity and productivity (displacing the arrival of the pocket calculator which had previously held that position).

At that time I had only limited experience of mainframe applications and knew nothing about micro's or our policy regarding the developement of computer based aids. I have subsequently learned that a number of different makes of machine were bought-in at various times, including several models of I.B.M., Sirius, Pet, Apple, D.E.C ., and others. Each area that acquired micro's developed its own applications which resulted in some machines being little used while others were overworked. This situation developed against a background of large scale mainframe usage by many departments including my own (Industrial Engineering). During the following two years I made contact with a number of people in other departments who were interested in micro's and we helped each other out in various ways. The few 'experts' who were found during this period were in the main mainframe biased, and tended to verge on paranoia at the mention of micro based spreadsheets, they were not much help.

Pressure from the 'users' areas of the company has recently resulted in the development of a comprehensive micro based system, complete with networking and links to both Mini and Mainframe, things are looking good, but not for Apple.

Exsisting Apples will continue in use for some years on stand-alone applications but no more will be purchased, we are standardising on the DEC Rainbow (yes I know it's heresy and somebody ought to be shot, but Apple Inc's own policy meant that they couldn't compete).

During the coming years as "micro's" acquire larger memory and storage capacity, as well as faster processors, I expect to see an accelerating move away from Mainframe to Mini-Micro operating systems. But that's still well in the future, large user companies don't change quickly and the computer industry still has a lot of work to do before the right products are available at the right price.

Meanwhile back at the beginning, when my departments first Apple arrived it was accompanied by the following:
• Two disk drives.
• 12" Monitor.
• Anadex DP9501 Matrix Printer.
• Paddles.
• DOS 3.3 System Master.
• Basics Disk.
• Visicalc (13 sector).
• Several Games.
• Micromodeller.
• Various Manuals.
The Apple itself was a Europlus, like everything else in the bundle it was second-hand having been passed on from another department.

After initial examination Visicalc, Micromodeller and the games were identified as being of immediate interest, within one month this was revised to Visicalc, games and the System Master, Micromodeller was consigned to a filing cabinet from where it is never likely to emerge. Before I am deluged with commercials on behalf of Micromodeller, I remind everyone that my basic premises included (and still do) items (2) & (3) and in those terms Micromodeller is a dead duck. While I accept that my range of contacts outside the company does not exceed forty people, I have yet to meet anybody (with our type of requirement) who regularly uses Micromodeller, despite the fact that several people have extolled its virtues. Occasionally as new personnel have transfered into the area, Micromodeller has been taken out and tried, but it is always discarded.

The games have proved to be worth their weight in RAM as aids to overcome peoples apprehensions about micro's, not to mention the fact that I have derived a great deal of pleasure from them.

Until last year the System Master was of interest to a very small number of people (ie. those who caught the bug), but this is changing since most people have begun to use the companies Open Learning Centre. The centre is equipped with a number od Apples and DEC outfits, and employees using the centre are able to work through various 'hands-on' courses which include basic introduction to:
• Computers .
• Programming.
• Word Processors.
• Special Courses

Visicalc was the software package that most people took to from the beginning and it was used on many of our activities, it is still used on a large scale in some areas where high capacity spreadsheets can meet a need. In addition to expansion software we also use VisiSort which enables alpha numeric sorting of Visicalc files, we find this very useful for identifying material handling labour requirements when the location of a range of materials at trackside is changed. A specially written program would have been better in some ways but parameter (1) won the day. 16 sector Visicalc replaced the 13 sector version about six months after we started.

Apart from the software which was supplied with the original Apple, most subsequent software acquisitions have been selected by the users. Additional hard and firmware has also been chossen by the users. Software purchases by the company have included Supercalc, VisiSort, Flashcalc, VisiPlot, VisiDex, VisiTerm, VisiTrend, DMS, Multiplan and VisiFile. Most of the machines are expanded by at least 128k and all but one include 80 column displays, only one is equipped with a Z80 card. We failed to convince the necessary people that accelerator boards would be a good buy, but then you can't win them all.

Supercalc was purchased when we were told that we couldn't run Visicalc with some 8" drives, it has been used on a very limited scale. Of the people who have used it most don't like the display and few find any advantage in it compared to expanded Visicalc/VisiSort.

VisiFile emerged from the depths of the Finance department where it had been little used, we have found it useful for a limited number of applications, but it certainly does not meet premise number (3) and will never be used on a large scale.
VisiPlot/Trend/Dex/Term arrived as part of a package with some new machines, but they have been little used. VisiPlot caused some excitement for a while but we experienced some difficulty in achieving printer dumps and it has never been used very much (must do something about that one of these days).

DMS is used on one machine only and not very often at that, it is not regarded as meeting premises (2) & (3), neither has it impressed us much with regard to (4).

Multiplan's arrival caused a great deal of excitement and it is used on a considerable scale. Most people who use it will not touch any 'Calc" if they can help it, although most of them also complain that Multiplan is too cold to catch a cold, and is too limited in memory size.

Flashcalc initially appeared to be the update that the 'Calc' brigade was looking for, it's ability to use whatever RAM the machine has is very useful and it has many of the features which are loved by the 'Plan' pundits. However Flashcalc does not have a sort facility and its PRODOS base complicates the use of VisiSort on its files.

Our most recent purchase is Practicalc ][ which is a combined Spreadsheet / Database ? Word Processor, complete with sort and search functions. The 'Calc' brigade have perked up and are busily finding out what Practicalc has to offer in addition to the search and sort, when I've had a chance to try it I will attemp a comparative review.

In the near future we will have Lotus 1-2-3 with the DEC machines as well as a large spreadsheet on the mini part of the new system.

Along the way we have written a few programs ourselves (in Applesoft, some compiled, for specialist applications, MTM tutorial, multi-activity charting etc) but those people with the ability to do so do not have the time, and it is awkward trying to accomodate three different makes of printer, two models of Apple, various 80 column cards, etc.

Spreadsheets still meet most of our local needs and are likely to do so for some time to come. Some 'experts' still tell us that we should not be using them for a lot of our applications, but we find that they have the following advantages:
1 • Immediately available.
2 • No queueing at the mainframe.
3 • Access 24 hours, 7 days a week.
4 • Very low cost.
5 • New applications developed within hours (sometimes minutes).
6 • Portability at no extra cost, modems etc
7 • No data loss/corruption due to other people.
8 • No application knowledge gap on the part of programmers.
9 • The product is as we want it, not as others would like us to have.

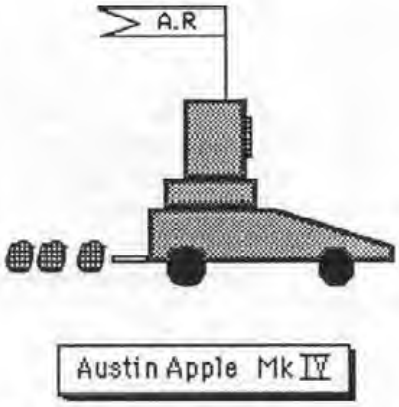
Due to the fact that like most professions we use a lot of jargon ( and so does our industry), actual applications are more dificult to describe and can only be generalised.

All our applications include calculations and tabulations of identities, time, quantity, and facilities with many permutations of them. Many of you will be familiar with manufacturing conventions in regard to identifying components and assemblies.
An assembled product is identified by:
• A model name which the customer will recognise.
• A design number.
• A part or assembly number.
• Occasionaly a model derivative or sub model name, design and part number.

All of our products (ie. assemblies) comprise a number of sub-assemblies each of which has its own identification, some products comprise of dozens of sub - assemblies and in some cases hundereds of parts (thousands when you are dealing with storage areas and systems). Identification and control is further complicated by the series of processes that each part or assembly must pass through, and whether or not a sub - assembly is wholly manufactured by us, or bought - in as a finished or part - finished item. The vast majority of our products are produced in thousands per week, with some sub - assemblies being common usage on a range of finished products.

Dependent on the processes involved, at various stages in manufacture there are specific requirements in terms of human skills, as well as tools, equipment, transport and storage. Each of the above is quantified in terms of volume (or number required), time available to produce the volume, work required to achieve the required quality at the volume, and time required to produce, move, sort, store, etc..

As you will realise permutations of the above associated with 'what if' questions , require an enormous amount of number crunching so that decisions can be made; computers are our only method of coping with the timescales that we operate under..




Austin Apple Mk IV

I could continue to generalise about the type of data that our Apple ][ (and other makes) process, but the above summary has probably given you the general idea. Before the micro, most 'what if' questions resulted in hours, sometimes days, of frantic pencil pushing. A 26 week forecast used to take about three days to complete, we can now do it in less than two hours (with more useful detail and greater accuracy). The effect of ongoing changes and modifications is now incorporated into the appropriate control model quickly, and no longer represents a human peak workload.

The Apples have been, and are, great. Shame that the season is drawing to a close, I hope the orchard will soon contain a new crop.

My own interest in Apples is in no way diminished and, thanks to a very understanding wife, I spend many happy hours on my own machine and in various club activities. I even enjoy the brain aches, although I often wish that the Apple didn't sound so smug when it beeps and announces yet another syntax error.

end

# APPLE SHOW 86

The Very first combined APPLE II and Macintosh Cultural Show is to be held at the Conference Centre,West Midland Safari Park, Bewdley, Worcs, DY12 1LF on **Saturday 1st March 1986.**

* * * * * *

This Premier event is dedicated to the thousands of Apple Users in the U.K. For the first time home and business users will have a chance to show other users what they have achieved with their Apple computers. It will be a day to share and exchange ideas, view exhibits, take lecture notes, compete programs and revel in that unique Apple Atmosphere.

* * * * * * * * * * *

- Private Bar
- Lecture Room
- Full Lunch Buffet
- Refreshments
- Program Competition
- Users Exhibition
- Specialist Lectures
- Mystery Guest
- Bring & Sell Market
- Laser Print Service
- Software Test Drive
- Latest Hardware

Prizes to be won for the categories below in our Program Competition

- Best Show Program
- Best Videoworks
- Best Spreadsheet Template
- Best Mac Desk Accessory
- Best Game
- Best Apple Art

Entrance to the show is ticket only, payment to be made before 20th February 1986. Admission is £4.00 and this includes *Free Lunch and Lectures*. Please make payment, with name and address, to **SHOW 86** (BASUG) and send to **BASUG** or direct to **Apple Show 86, West Midland Safari Park, Bewdley, Worcs, DY12 1LF.**

We have a limited entry so to avoid disappointment please register early.

* * * * * *

## SHOW NOTES

Firstly, this is a non profit show, organised by Apple enthusiasts for Apple enthusiasts, with the help and support of BASUG and Apple (U.K.) To ensure its future as a regular event we need your support for this show!!

The Program Competition has been organised to hopefully further encourage programming on Apples, especially on the Mac, as very little has been written for it in the U.K. Entrance to the competition is restricted to members registered for the show. Only one entry will be accepted for each category. Prizes will be announced at a later update. Entries are to be sent with your show registration number, program category & name and address to :

**Apple Show 86, West Midland Safari Park, Bewdley, Worcs, DY12 1LF.**

" Season Greetings to you all " .....*Ivan Knezovich* (Show Organiser)

# APPLE-FEST

Are you cold, depressed, and wish you could get out and meet other Apple Users ?
Well you now have the chance, arrangements are well advanced for a special BRITISH APPLEFEST to be held on Saturday 26th January 1985.

The venue, in the picturesqe setting of the West Midlands Safari Park at Bewdley, near Kidderminster has been chosen for the expert attention given by the staff to guests and the excellent facilities available.

Food in the form of a Finger Buffet is provided in the cost. Members who pre-book will be given priority over casual visiters.

We will be holding a seminar in conjunction with the chance to see and try many new products for the Apple ][ and Macintosh range.

Many special events have been organised, these include:
Apple bring and buy sale.
Laserwriter Corner.
Competitions.
Dealers stands.
Seminars on:
- Communications .
- Spreadsheets.
- Hardware.
- Software.
- Macintosh
- Apple ][ & its future.
- Networking.
- Publishing on the Mac.

We also are able to offer (if the demand is there) transport from the following areas:
Route 1:
London - Watford - Luton - Milton Keynes - Northampton - Coventry.
Route 2:
Leeds - Sheffield - Nottingham - Leicester - Birmingham.
Route 3:
Liverpool - Manchester - Stoke on Trent - Stafford - Wolverhampton .

What will it cost ?
Members will receive entrance and food for an inclusive price of £4.00

Entance on the day will be £5.00 for members or non-members. No food will be available without pre-booking.

Transport arrangements depend on the number of persons attending and will be notified when arrangements are finalised. If you want transport please let us know a.s.a.p.

## YOU RUN A LOCAL GROUP?

**.....then read this!**

Have you ever started out to a local group meeting thinking that your evening was planned, that you were looking forward to a good demo, only to find that the person who should be doing the demo fails to arrive, perhaps through no fault of his own. I have, several times.

The trials of running a local group are many. People who have their computer hooked up to several bits of delicate hardware can be understandably reluctant to pull everything apart and brave the British weather to drag their equipment along to a meeting.

Some of the most knowledgeable members of the group are often the most reluctant to speak. But there are also many benefits, new friends made, problems solved, broadening one's view of how the machines can be used, and so on.

Several present members, and ex-members of the committee are involved in running groups, but there are some groups with whom we have very little contact.

The committee would like this to change. I am sure that there will be benefits from those running local groups getting together and swapping information on good demos, firms willing to bring equipment etc.

As a start in the right direction, I would like those running a local groupwho know that they have no committee member regularly visiting their group, to make contact with me, Norah Arnold, on [illegible]

Don't forget about it, give me a ring so that we can all get to know each other a little better.

**ED's Note.....** Norah Arnold is the Secretary of BASUG, one of the leading lights at the Herts Local Group and now is taking responsibility for the local groups - I would therefore urge those concerned to contact Norah **NOW.**

## PROFILE of the Treasurer

Hi,Folks

This is your treasurer calling. I have now been on the Committee for the past six months. My nomination may have had something to do with the fact that I am an accountant. I actually work for Royal Insurance Group. My husband and I have been BASUG members for about three years, and finally got roped into doing something for the Club instead of simply benefitting from it.

We are Apple III and //e users, and tend to use Appleworks for the Club accounts. Ascii Express Professional is used on those occasions when I need to send information to other Committee members, via THE FORCE.

I approached the treasurer's job with some trepidation, but need not have worried because it soon became obvious to me that during the previous year, the Committee had made great strides to improve the financial position of BASUG.

One example of this was the introduction of a better bookkeeping system.

I am pleased to report that the Auditors have recently presented to us the draft accounts for the year 1984/85, and they clearly show a successful year for the Club. Inroads have been made into clearing the previous years' deficit, and this trend seems likely to continue.

I am part of a financial sub-committee. It is our task to look at budgeting and efficiency, and it is hoped that we can continue to contribute to the smooth running of the Club.

The 1984/85 accounts will be reported in full in your next edition of Hardcore, prior to being presented at the Annual General Meeting.

I am optimistic that the future for the Club looks good.

Irene Flaxman Treasurer

## CLUB NEWS

The Bristol Apple Users and Dabblers (BAUD), meet once a month. Date and time, and place variable. Enthusiasts on all the machines, meet to swop ideas, problems and then retire to the pub for half an hour before closing time. About a dozen or so attend each meeting. We are looking for a permananent venue, but in the meantime, contact Mike Farmer (Secretary) [illegible], or Mike Evans [illegible] or Dave Munoz [illegible] Next meeting -6th Dec, 7.30 Bath Academy of Art, Corsham.

# The British Apple Systems User Group

The Committee on behalf of all members wish to thank the following for the help they have given over the past year and to say

"A Merry Christmas

and a

Happy New Year"

# THANK YOU

## To all Hardcore Contributors.

Ann Austin and Julie Panks in distributing disks.

Phillip Faber for the Prestel Pages.

Tony Game for BABBS1.
Mike Jones for BABBS 2.

Derek Church and Frank Everett for organising the exhibitions.

Stefan Mucha for his design and artwork.

Ivan Knesovitch for the MacSIG and the APPLE-FEST 86.

Peter Trinder and Geoff Drake for the MacLibrary Disks.

Chris Williams for the HOT-LINE.

**AN OPEN CHRISTMAS CARD**

## CREDIT for your efforts

In the past BASUG has issued a series of credit tokens for articles, reviews and other contributions to Hardcore or for programs donated to the Software Library.

These tokens were meant to be returned in part payment for either blank disks or Library software.

Unfortunately the administration of the system - who was given tokens, and how many, and for what - has become unworkable. some people seemed to save them up and then want to cash in a whole heap at once, and others never bothered to claim their value.

So we have decided to discontinue the practice of issuing them, and will in future give prizes in the form of disks for articles printed in Hardcore, to a total of £50 per issue, these will be divided up into categories for the best article, for the best tip/idea, and minor prizes of for other contributions.

Each issue will have a list of the winners for the previous edition.

Software contributors will be rewarded with disks of their choice from the library, depending on the number of programs donated.

***For those who still have tokens to be redeemed, send them in by 31st January 1986 latest, and they will still count but strictly at the rate of £1 plus a token for either a blank disk or a Library disk of your choice. (Mac owners at the rate of £3 + 3 tokens per disk or software).***

## HELP

Another member needs comms software for the III - also required is a Word Processor if you can help please ring Bernard on Itchen Abbas 619 or Work No 0962 68166.

Any member wishing to swap a III drive for a new ][ drive contact Bernard on Itchen Abbas 619 or Work No [illegible]

# SPEEDLOADER

A 'fast loading disk' utility that does not require a DOS to operate, it can therefore be used with custom disk systems other than CPM, though it has been optimised for use under DOS 3.3.

The Master systems disk may be used to prepare and service 'custom fast-loading disks'. These will generally load your programmes and run them up to six times faster than normal. DOS may be included as a file on the prepared disk, and most programmes of about 20k in length will load DOS and run in about 2-3 seconds after the drive has re-calibrated.

The disks prepared with Speedloader are under a normal DOS 3.3 environment, and the spare blocks on the disk may be used as normal file space.

A Speedloader initialised disk has only the fastloader utility placed on it to start. The loading address may be changed to suit your own application, the loader taking up to 14 pages of memory.
A seperate directory is also created for the Speedloader files, and the main VTOC is marked accordingly. Files may be marked in the directory in such a way, that when loaded, they may either be simply loaded, loaded and run, if a DOS file then loaded and started, if APPLESOFT or INTEGER BASIC the language may be cold-started and finally, one file is marked as the last ' HELLO ' programme. In this way multiple file loads are possible before execution of the main programme. In addition, an address may be referenced twice before loading allowing for instance the language card to be switched on to allow 64k DOS to be loaded.

Utilities are provided to prepare your custom DOS into a suitable file for running, this includes all page 3 vectors. All files other than TEXT files may be loaded and run, the latter you would normally open and read from BASIC itself.

The disk once prepared may be copied using the normal copy programmes, the time spent in preparation is amply rewarded by the subsequent sheer speed and smoothness of loading. It is especially suitable for loading and running games or programs that do not access DOS once they are in memory, as no DOS need be loaded thus saving time. On a test disk using ten HI-RES pictures, we were able to load and display these frames in a continuous cycle of six seconds for the ten pictures.

The loader may be recalled from BASIC or MACHINE CODE programmes using the ampersand vector, allowing for instance tables of data to be SPEEDLOADED into memory after execution of the main programme.

A full 45 page manual is provided on the back of the disk, in the form of APPLEWRITER TEXT FILES. A simple utility allows the dumping to screen or printer for those that do not have APPLEWRITER ][. Full details on how to use the system are included, and some examples of how to prepare custom disks are also given.

The SPEEDLOADER system may be used to prepare commercial fast-loading programme disks, provided only the loader is present on the final disk, and a copyright message is given with details of availability.

No licence fee is payable if the following conditions are met. The master SPEEDLOADER disk must have been purchased by the writer of the programme, and the copyright information shown should take the form of either a 3 second display on the screen or be included in the first page of the programme manual. The details will include the name of the authors (Written by Cornelius Bongers and Willem Schouten) and the availability of the programme (i.e BASUG Ltd. ).

**Available from BASUG NOW !!**
**Price £16 (inc V.A.T. Post and Packing)**

**SPEEDLOADER**
**©CBWS Productions**
**Amsterdam**

## APPLE ][:
## IS THERE AN AFTER-LIFE?

This gets us back to the many Apple programmers and the many other individuals of my acquaintance who are so reactionary that they go back to assembler for their own masochistic pleasure, while my employer is in the fourth generation languages and all our professionals laugh like a drain when the two parties meet. But do possessors of Tandies, Commodores and other such do this ? I don't think that this is so but I hope you will write and say that my observations do not accord with your experience.

That interesting article by Charles Rubin discusses what people buy and the reasons why ; it appears however to be assumed that buy they will. But is this not the main question ? Steve Jobs, in this same article, is quoted as saying "Our future in the long run is totally Macintosh...". Of course, we probably all agree that we would accept paying a modest price to make the exchange but at todays price..... who still believes in Santa Claus ?. Is the " sealed box " a big factor ? It may be for some, but some of us could survive as we do without looking into car engine. Generation Gap ? No, rather a desire to have out-grown these teenage feelings and to be ready to face twentieth century technology.The summary of this article is that I suggest there is a series of Apple ][ markets, which Apple has decided - in desperation - to investigate, but that there is a large impecunious sub-market which will have to be tempted to do anything to upgrade, that another is in laboratory and plant instrument control and a third in the "mechanic" philospher who enjoys machine or assembler languages but we all hope that Apple will bear us in mind. We also feel that the sort of articles by John Sharp and others who precede him will still have a big audience from us still struggling far behind. Perhaps more assembler or some simpler things in memory mapping and manipulations are needed and which are soon forgotten when we don't use the Apple for a while.

---

**Editors note:** David Wilshere lives in Switzerland and has obviously thought about Apple ][ and its exsistence in the future. I have published the whole article as sent because I believe that it may interest you and generate some replies. I would welcome any response to this article .

end

## PROFILE OF A LOCAL CLUB
by William G Watson

### MIDAPPLE

The Apple Computer Users' Club in the West Midlands meets on the second Friday in each month at 7 pm at I.T.E.C. Tildasley Street, West Bromwich

Some two years ago, a group of enthusiasts decided that it would be a good idea to found a club for like-minded people. After one or two abortive attempts **MIDAPPLE** emerged as a very successful, well supported and well organised club.

In the early days it was necessary to take our machines along to clubnights but for a variety of reasons this proved unsatisfactory. We decided to seek a venue where **APPLE** computers were already installed.

We were very fortunate to meet with at one of the computer shows John Cooper of I.T.E.C.

At I.T.E.C. we have available to us:
**16 APPLE //e**
**1 APPLE //+**
**1 MacINTOSH.**

The club is run entirely by its members; and we decided at the outset that each meeting should be programmed and structured. The meetings start promptly at seven o'clock by which time machines are booted showing graphic displays of that evening's events and details of forthcoming meetings. This creates an ambience of welcome to the members and creates the opportunity for discussion among us. An eye is kept out for new members and they are introduced to some-one who will be responsible for them for the evening.

At 7.20pm we group together and notices are given out and a forum is provided for members to ask questions and exchange news and/or gossip. "Have you heard the latest on Steve Jobs...". That sort of thing.

At 7.30pm the evening's speaker is introduced and the following hour is set aside for a demonstration relating to an **APPLE** computer topic.

At 8.30pm self-help coffee is available followed by a machine code class for those interested or free time for members to do as they wish until 10pm. It is a challenging task to provide a demonstration or speaker each month but apart from an unplanned snowstorm last February we have been able to provide a full, diverse and we hope interesting program.

We have drawn largely on our members' talents to speak about such interests as spreadsheets, DOS, graphics, music and word processing.

On occasions we have invited other people to give us demonstrations of their particular interests or products. For example we have gone online to America, thanks to Richard Boyd (BASUG committee member) and met the author of MacAUTHOR, Mike Glover (Leicester Computer Centre).

The club is simply financed. No charge is levied to us by I.T.E.C. for use of the facilities. An annual subsciption of £3.50 is paid by members to meet running expenses. In addition each member contributes 50p to cover the cost of coffee and a monthly newsletter.

Every effort is made to make members feel part of the club. We have a hardcore membership of 30.

Children and young people are very welcome provided a parent is a member who will be responsible for them. In general our members are hobbyists, with a sprinkling of small business users.

The Newsletter is in its seventh edition and is produced entirely on an **APPLE** by two of the club members. It is well worth the time spent on it as it is an excellent medium for ensuring dissemination of information and membership involvement. Contributions from members are what make it tick and many different aspects of computer usage obtain coverage.

If you would like to come along to one of our meetings you would be very welcome. Why not telephone :
**Tom Wright**
**Secretary. -** [illegible]
**Harry Gardiner**
**Information Officer -** [illegible]

They will give you more information about **MIDAPPLE** and arrange a personal introduction for you.

We have a great club and enjoy meeting fellow enthusiasts.

## ANOTHER GOOD IDEA
by WILLIAM G WATSON

### GAMES - HIGHSCORE
### APPLE //e

Many games do not have the facility to store high scores to disk. However depending on the way the program has been written it may be possible to download the graphic screen that shows the high score to disk without a knowledge of machine code or a hardware utility such as SNAPSHOT.
What I do is this.
When the HIRES screen which shows the high score I want to preserve is visible I flip up the disk drive gate and hit **CONTROL-RESET** ( It's always best to use a **BACK-UP** and not the original because if you should accidently do this during a WRITE operation you are going to run the risk of losing your program).
If you are lucky (unlikely) and you are left with an operable DOS then try saving the last graphic screen to disk. Although no graphic is on-screen it may still be in memory at the conventional memory location and so may be saved.
You will need a DOS 3.3 initiallised slave diskette for this. Insert it in the drive instead of the game disk and type : -
**BSAVE HIGHSCORE, A$2000, L$2000** and press **< RETURN >**.
To check if you saved the highscore screen type : -

**POKE - 16302,0** and **< RETURN >**

You got it ! Good. Now let's go back to the point where you hit **CONTROL-RESET** and you were not left with an operable DOS. All is not lost. What you do is this.
**DO NOT SWITCH OFF THE APPLE** because hopefully (definitely not guaranteed) your graphic screen is still in memory and it's a matter of getting it out. Take out your game disk and insert a DOS 3.3 initiallised slave diskette and hit
**OPEN APPLE CONTROL - RESET.**
This will load DOS into your APPLE's memory but will not overwrite memory location **$2000** onwards where you are hoping your screen is stored.
At the Applesoft cursor type : -
**BSAVE HIGHSCORE, A$2000, L$2000** and **< RETURN >.**

Now try out the check above to see if you have got it.

If you have an **APPLE //+** you may be able to do as above providing you can use **RESET** or **CONTROL RESET** to either leave you in DOS or to boot in DOS from another disk. Currently I am saving the highscore on MR DO at level 18 with a score of 178300.

# FORMAT-80. HARDWARE MODIFICATION

As a recent arrival within BASUG's ranks I have been deriving considerable pleasure from reading through back issues of Hardcore which were loaned to me by a friend, while doing so I came across Chester Kemp's excellent review of Format-80 in the June 1984 issue.

At the end of his review Chester mentioned a snag with the Apple ][+ " if it is installed and co-resides with game paddles with a two-way adapter (such as EZ-Port), then your arcade games will not function properly if they use the triggers ".

I recently contributed the following notes to the MIDAPPLE (thats Apple nuts in the Birmingham area folks !) newsletter after obtaining a lot of guidance from one of our scientific types ( good shower in the clubs aren't they ?). The notes are offered to Hardcore in case they are of assistance to anyone who thinks Format-80 is wonderful (which it is) but has to have regular fixes of Lode Runner etc (guilty yer honour).

The following notes are intended to help you to achieve improved operating convenience with very little effort, no technical knowledge is required and you will not have to do any soldering.

The most effective way of simplifying the change between Joystick and Format-80 includes the installation of an EZ-Port or similar device. EZ-Ports consist of a ribbon cable with a DIP header on one end (to fit into internal games socket), and a ZIF (zero insertion force) game socket on the other end. Installation of an EZ-Port allows you to effectively have your games socket mounted on the outside of the machine (eg adjacent to the keyboard). My EZ-Port cost me £7.00 secondhand and you could make your own version for less than half the advertised cost.

Avoiding the need for any change of plugs requires the introduction of switching capability :
• For the shift key / lock functions •
• For the joystick. •
As well as continuous connection of the shift key and shift lock functions, the joystick can still be removed if required.

**Shift Key Functions**

I chose to start from scratch with this and replaced the Format-80 adaptor complete (the old adaptor can go into the useful bits and thingies box).

Components required include :
• 4 mini-test clips. •
• 2 lengths 20-gauge stranded test-probe wire (I used Red and Black). •
• 2 single-pole, single-throw switches (SPST). •

You will need something to mount the switches on, or in (I don't like drilling holes in my Apple cos it lets the worms in).

1. • Remove the lid from your ][+. •

2. • Disconnect and remove the old Format - 80 adaptor. •

3. • Decide where your switches are to be mounted and cut two lengths of wire (ie 1 red & 1 black), each length to be equal to twice the distance from underneath the keyboard to the switch location. •

4. • Attach a mini-clip to each end of each length of wire by pulling the end cap off and inserting the wire through the aperture in the side of the cap and attaching it to the connector. Knot the wire to it or if all else fails solder it !. Replace the end cap on the clip. You can simplify this process by using a Tandy Part Number 278-016 which is a pair of mini-clips with 20" of wire already attached. •

5. • Cut each wire at its mid-point. •

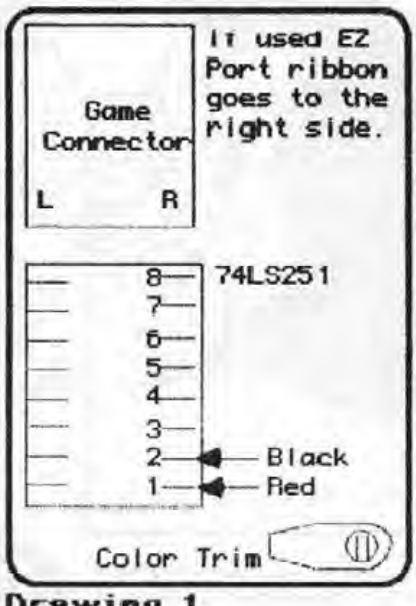
6. • Clip one of the black wires to keyboard wire number 3. •

7. • Clip one of the red wires to keyboard wire number 24. •

8. • Identify chip number 74LS251 on the motherboard right hand side of row H, immediately in front of the game connector. •

9. • Clip the second length of red wire to pin number 1 of the 74LS251 (drawing 1)•

10.• Clip the second length of black wire to pin number 2 of the 74LS251 (drawing 1)•



Drawing 1

11. • Take all the loose ends of wire through a ventilation slot or the rear slots, depending on where you are going to mount the switches. •

12.• If you are mounting your switches in a box (eg a Tandy project box), push the wires through the access hole(s) in the back of the box. •

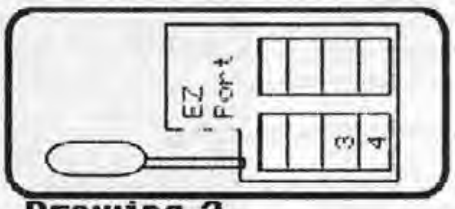
13.• Connect both red wires to an SPST switch. •

14.• Connect both black wires to an SPST switch. •

15.• Ensure that both switches are securely mounted. •

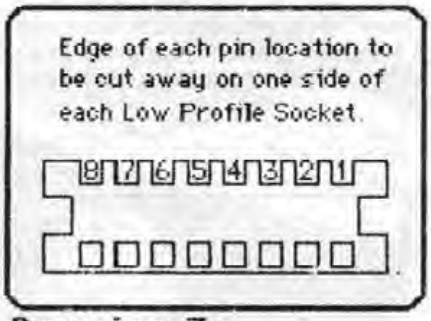
16.• Check that mini-clips are still securely attached to their locations.•

17.• Replace the Apples lid. •



Drawing 2.

Switches are included in the shift key connections because those connections can interfere with the operation of some software if left permanently connected, now that we can switch them off when Format-80 is not in use they should give no trouble.



Drawing 3

Although the introduction of switches into the shift key functions prevents Format-80 from interferring with the joystick, when the joystick is left continuously connected it will interfere with Format-80 unless we provide another switching facility.

Continued on next page

**Joystick Switching.**

The following method can be used regardless of whether or not you have an EZ-Port (if you plug the 'switches' into the internal game socket you will of course have to remove the Apple's lid each time you operate the switches) . Items required include:

a. • Two 16-Pin Low-Profile DIP Sockets.

b. • One 8-Position SPST DIP Switch Block.

I have mentioned the Tandy Low-Profile sockets in the guide list of prices at the end of these notes, they will do the job, but the type that has a removable cover plate is really easiest to work with and is the type covered in the following method.

1. • Remove the cover plate from the low-profile sockets and cut the sides from tne row of pin locations (drawing 3). This is done to provide better clearance for the Switch Block's pins. If you have got sockets without removable covers you can probably manage without doing this.

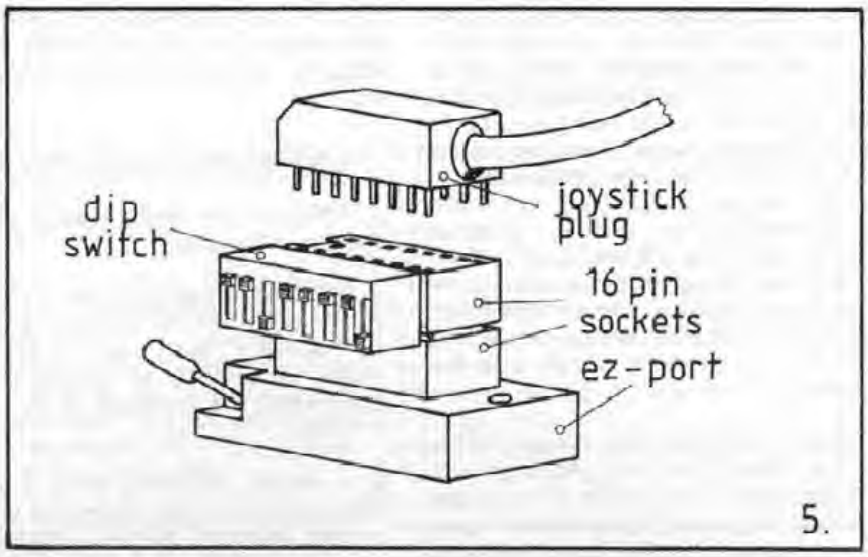
2. • Replace the covers on the sockets.

3. • Cut pins number 3 and 8 from one of the sockets (on the side that has had the pin locations in the cover cut).

4. • Bend both rows of pins on the DIP Switch Block down (drawing 4).

5. • Seat the switch block's top row of pins in the side of the socket that has had pins 3 & 8 removed (you should find that the blocks's bottom row of pins will be in contact with the socket's pins).

6. • Seat the switch block's bottom row of pins together with the upper socket's pins into the second socket (drawing 4).



5.

7. • Locate the Joystick into the top low-profile socket and press the assembly firmly.

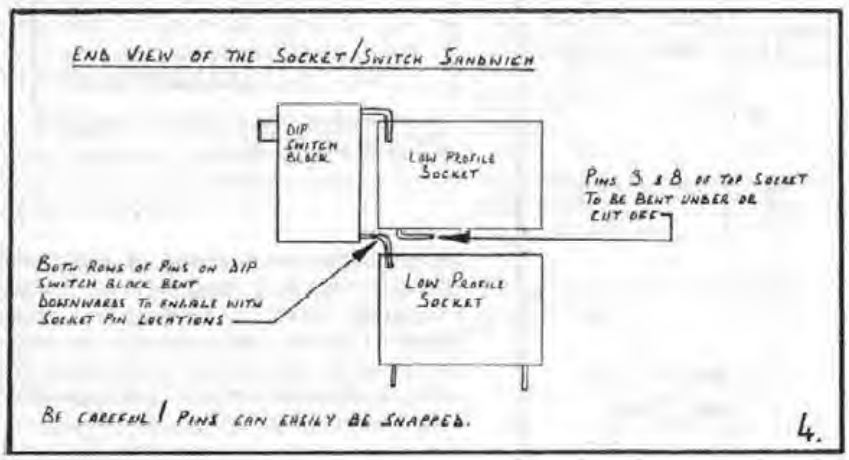
8. • Locate the assembly into your EZ-Port or game socket (drawing 5).

When in use switch settings will be as follows;

a. • Format-80 in use - Shift functions ON. • Joystick switches 3 & 8 OFF.

b. • Joystick in use - Shift functions OFF. • Joystick switches 3 & 8 ON.

Drawing 2 is provided for identification of pin locations 3 & 4, in case anybody who has an EZ-Port and has broken the original Format-80 connector block's pins simply wants to lock the wires into the EZ-Port until they have achieved a more permanent repair.



4.

You could obviously save money by using a single wire colour, and use a smaller switch than the toggle switch mentioned above.
An 8-Position DIP switch block was used for two reasons:
a. • it's easy to line up on the sockets.
b. • you have now got switches installed on one side of the sockets in case you decide to introduce another modification.

That's about it for Format-80 , I have not yet made an "EZ-Port" but will get round to it one of these days, it would be useful to have more than one socket and switching between the sockets, I must talk with our technical type. By the way, I have also installed a volume control which has solved the late night / early morning problem. Maplins were the people who had a suitable potentiometer, I covered miles looking for one before I found them in Perry Barr on the north side of Birmingham.

**COMPONENT PRICES**

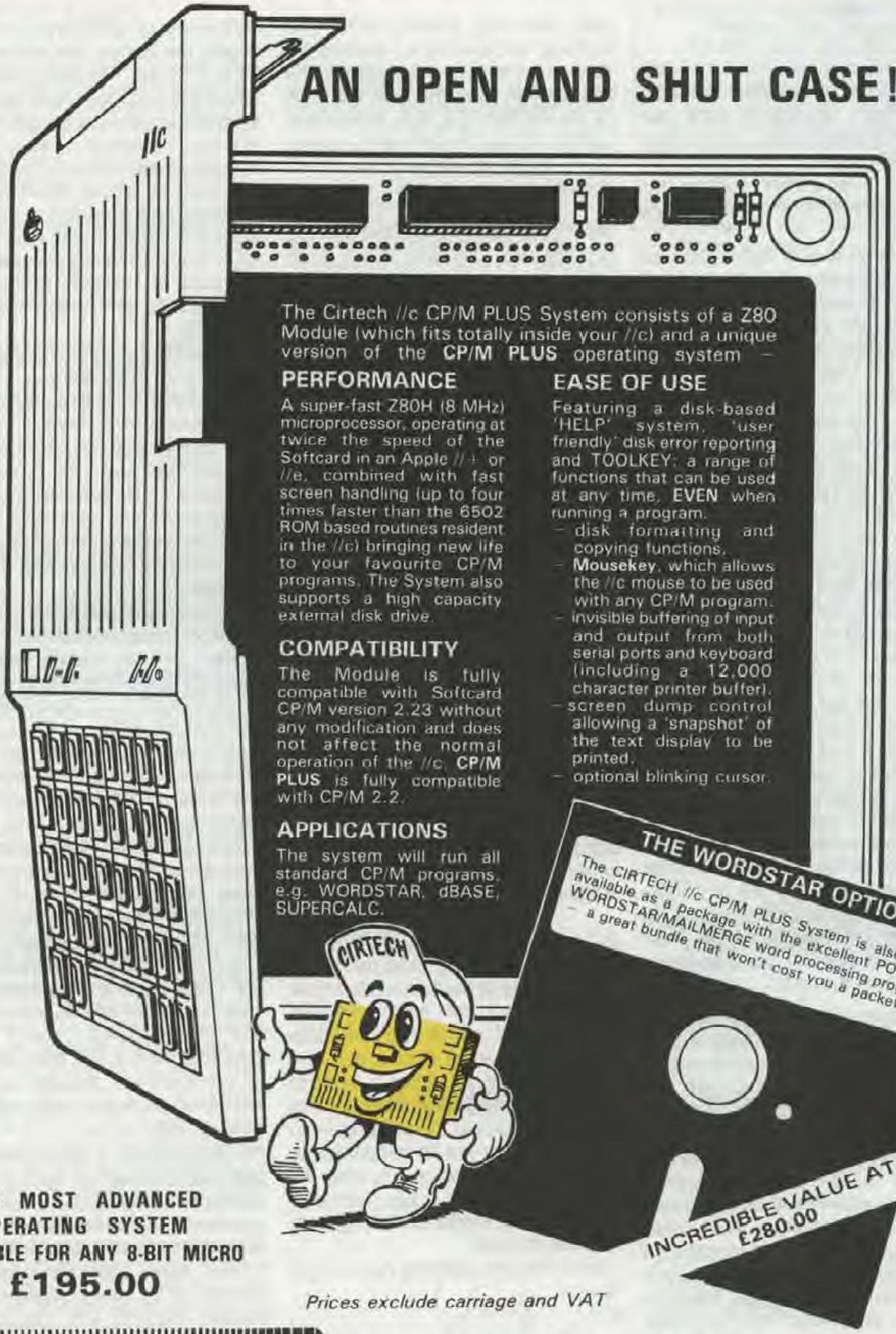
Components used or referred to include the following:

1. • EZ-Port, Pace Software, £16.10.
2. • EZ-Port II, Pace Software, £26.45.
3. • Mini-Clip leads, per pair 20" wires, 278-016 £2..49.
4. • Micro-Test Clips, per pair 270-370 £2.99.
5. • 16-Pin Low-Profile DIP sockets, 279-1998 £0.69.
6. • 8-Position SPST DIP Switch Block, 275-1301 £1.59.
7. • Test-Probe Wire (25'), 20-gauge Red 278-553 £2.19 Black 278-554 £2.19
8. • Standard Toggles (switches), 3 amp & 125 VAC, SPST 275-602 £0.79.
9. • Variety of project boxes, various prices.

Tom Wright

# THE ULTIMATE APPLE IIc OPERATING SYSTEM?

## AN OPEN AND SHUT CASE!




The Cirtech //c CP/M PLUS System consists of a Z80 Module (which fits totally inside your //c) and a unique version of the **CP/M PLUS** operating system –

### PERFORMANCE

A super-fast Z80H (8 MHz) microprocessor, operating at twice the speed of the Softcard in an Apple //+ or //e, combined with fast screen handling (up to four times faster than the 6502 ROM based routines resident in the //c) bringing new life to your favourite CP/M programs. The System also supports a high capacity external disk drive.

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- optional blinking cursor.

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The CIRTECH //c CP/M PLUS System is also now available as a package with the excellent POCKET WORDSTAR/MAILMERGE word processing program – a great bundle that won't cost you a packet!

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Z80 is a registered trademark of ZILOG INC.

# COMMUNICATIONS WITHOUT TEARS

Ewen Wannop

Well, you've unpacked the little black box, struggled with the cables, hooked it all up, booted your terminal programme, dialled the number ..... and then nothing, not even a bleep from your trusty Applemac.
Take a large slug of Apple juice, sit down and contemplate the problem properly. It is only then you notice that slogan you hung in your Appleroom one day many moons ago .... 'If all else fails, read the MANUAL'
Well and you thought communications was going to be easy, you have to be able to read as well ! Still you pick up the manual, and look at the index.
'How to setup your System', Chap 1, it says. Looks like you may get somewhere here ....
'First plug in the Serial card'. Serial card, you did remember to get one didn't you? Or are you lucky and have a //c, or horror of horrors forgive me for mentioning it, a MAC.
'Next check that your modem/serial card cable is correctly wired'. This can be a nightmare, there are female plugs, male plugs, 25way D plugs, 5 pin domino plugs, DCE ends, DTE ends and goodness knows what else. Get help if you are in trouble here, it is the most common cause of modem problems. Once you have the right connection, you can forget about it from then on.

'Plug your modem into the BT socket'. Hang on, is that a red sticker there, what does it say ... 'Sorry, you have bought an unapproved modem, connecting this apparatus to any BT phone system will land you in deep trouble and a big fine' ... Oh dear, but just a minute, it wasn't red at all, it is a green one and says ... 'Well done, you bought an approved modem, go ahead and plug it in'. You did remember to get sockets fitted by Telecom, didn't you? You sent back your old phone to save its rental, and now you have a brand spanking new memory phone with nice buttons, to do all your dialling for you. In the modem lead goes to the wall socket, and there on the back of the modem is a nice convenient socket to park the phone in, so you don't have to unplug to use it normally.

'Boot your disc and dial the service you require', OH dear it still does not work, what have you done wrong this time. Back to Chap 1 ...
'Configure the disc for your system' ... Ah well I suppose it does need to know which slot everything is in, and it would be an idea to tell it what baud rate you are going to use, and it seems reasonable to tell it what bit format the other end wants. 8N1 gets you by in most situations.

Off we go again, that Bulletin Board in Timbuctoo is said to be a good one, lets dial it up. Engaged! How dare it. Still I suppose other people use it as well, but we have auto-redial on our phone, so try again. Typically up to half an hour later, and three more Apple juices, we get the ringing tone. Give it about four rings, if it doesn't answer in that time, then it is not a normal computer service, hang up and spare the person at the other end please. But it answers, a tone whistles at you, what do we do now.

Ah well having started on Chap 1, you were wise and read on, found out what you should do next, so you are prepared. You switch on your modem and put it into Originate mode. The carrier light comes on, and suddenly you hear a flight of starlings coming down the phone at you. Don't panic, it is the bulletin board sending you its header page, put the phone down so you keep the line clean from your nervous coughing, the modem will hang on to the line for you.
Ah we have something now on the screen ...

Well I hope it was like that, if not, you may have had the modem set to Bell tones, or you may have been ringing the States, and were still on CCITT tones. The other end may have been on Originate tones, which means you should be on Answer tones, there are two complementary sets of tones, and you must be on the other set to the computer you are calling. You must have the same baud rate as the other end, or the complementary in the case of 1200/75. In that case you must be on 75/1200 if he is on 1200/75.
You got all that right, and you see a message on the screen,
'FIRST NAME:', what do we do here, put it in I suppose. If you must hide your proper identity, please respect the system and use a sensible pseudonym. Remember BT can do nasty things to you if you use obscene words on the phone line, it is an offence to send any, even by computer!
In goes your name, but a hint here, if this is not your first time on the system, you can usually enter your name by spacing first and last with a semicolon. Like this ... JOE;BLOGGS<CR>
'LAST NAME:' will come next. If you have been there before, it will now say where it thinks you are from, and if that is correct,
'FROM LONDON ?' Just answer 'Y' here, no <CR>. But this is your first time, so you will need to put in where it is you live, no semicolons here, but you can usually put in more than one word , so 'LONDON ENGLAND' sounds good. Again, if you have been here before, you will now see 'PASSWORD:', but if this is your first time, it will then ask you for your phone number, and a password that you will use next time you log on.
The menus from now on, vary from one board to another, but if in doubt usually pressing <CR> will bring you up a more detailed description of the menu. You may want to find the 'Utility' area first, and set the system up for your computer. Most bulletin boards will assume, at first, that you do not have lower case, and can only display 40

Continued on page 18

# EPSON LX-80 REVIEW

by Patrick Eagar.

In 1982 I spent nearly £400 on an Epson MX-80 FT (Mk1). To Epson's credit, I was subsequently able to update this printer to a FT (Mk3) by the simple substitution of three chips, for a total cost of around £30. A delightful example of planned unobsolescence.

One disadvantage of the MX-80 and the majority of dot matrix printers is that the characters still have that "dotty" look. Only at the miniscule (condensed subscript level) do the dots join up.

The announcement of the LX-80 was most welcome; the specification and the price seemed too good to be true. However I had a considerable amount of software ranging from an involved suite of home produced programs (mainly compiled in Basic, running under DOS 3.3 / Diversi-DOS and Pro-DOS) to Appleworks and Mousepaint - the latest things in Pro-DOS. The MX-80 was connected to the Apple ][e via a Pkaso parallel (Centronics) interface.

I took the plunge and bought one, after all £190 plus V.A.T. is less than half the amount I paid for my original printer.

All credit to Epson, and somewhat to my surprise, compatibility appears to be 100%. All that I had to do was unplug the MX-80, plug in the LX-80 and switch on. Everything from my software and Appleworks to the graphic dumps from Mousepaint worked perfectly first time.

Those with experience of the RX-80 and the FX-80 will have already come across italic and elite type faces. I am amazed that for half the cost of my original printer, I can expand my variation of type faces three- or four- fold.The near letter quality output is superb, especially with a new ribbon - which brings me to one of the snags concerning the Epson LX-80. The ribbon cartridge is of a different construction and holds considerable less ribbon, perhaps only a quarter (or less) of that in the MX-80 and FX-80 cartridges. Consequently the ribbon wears out much more quickly, but at least the cost of a cartridge is less. Typically I have paid £3.50 to £3.95 for an LX-80 cartridge as against £5 to £8 for one for an MX-80 (BASUG price £6.30). No doubt other members will have found wider variations, and I haven't done a comprehensive price survey. But it would seem that running costs are likely to be quite a lot higher on the new LX-80 as compared with the MX- and FX- series.

The standard output is a claimed 100 characters per second (cps.); under NLQ it drops to something nearer 12 cps. NLQ can be selected either through software control, the sequence is ESC "x" 1, or through a 'select' and 'set' sequence using the traditional three Epson switches (ON-LINE, FF, LF) on the top of the printer. This is probably the best way of switching to NLQ if you use Appleworks and miss all the flexibility of embedded Applewriter commands.

The basic machine comes without a tractor feed unit; and can take only hand-fed single sheets. The alternative extras are a tractor feed unit (for around £20 + VAT) and a single sheet feeder (for around £45 + VAT).

I have bought the tractor unit, which is easy enough to use, and remove and replace for single sheet use. I do miss a simple way of tearing off the fanfold sheets. There seems no alternative to either winding on a whole sheet and tearing at the perforations, or holding a ruler (or other straight edge) against the unit and tearing mid sheet - not too bad with practice ! The sheet-fed unit appears to be well designed, but I have had no experience with it so far.

Another limitation is that there is no adjustment possible for thickness of paper. The instructions advise two sheets (original and one copy, presumably with carbon) as maximum.

There are a number of international character sets, which can be set permanently using dip switches or under software control.

For a low price printer with Near Letter Quality capability the LX-80 would appear to offer a lot. How near 'NLQ' is would depend on personal taste. The LX-80 is closer than anything before from Epson at this price.

**EPSON®**

## ANOTHER GOOD IDEA
**by William G Watson**

A while ago I came across a book called
**"WHATS THE NUMBER (1000 quiz questions)"**
by Frank Smith / Ian Messiter published by Foulsham (1982)

Within it there are 1000 questions which have only one constant numeric answer to each question.

It gave me the idea for writing a simple quiz program that may be useful to teachers and others.

The listing given is the bare bones.No attempt has been made at error-trapping or screen-formatting, etc. so that the principles may be clearly identified with a minimum knowledge of B.A.S.I.C.

This type of quiz overcomes the problem of the end-user giving valid but unexpected answers as is experienced by spelling or syntaxical problems. For instance imagine the difficulty of writing a routine to differentiate between 'Apple' : 'APPLE' : 'apple'.

Apart from being a development tool in teaching B.A.S.I.C., an end-product may be used in a variety of environments such as history, mathematics or physics.

```
10   PRINT "QUIZ"
50   READ B$
60   INPUT "MY ANSWER IS ";C$
70   IF C$ = B$ THEN PRINT
"CORRECT" :
     SC = SC + 1
80   IF C$ <> B$ THEN PRINT
"WRONG" : PRINT "THE ANSWER
IS "; B$7
90   NEXT A
100  PRINT "SCORE IS "; SC:
END
200  DATA BATTLE OF
HASTINGS, 1066, OLD PENNIES
IN A NEW PENNY, 2.4, VALUE
OF PI (TO 4 DECIMAL
PLACES),3.1416
```

This program would then be expanded to give, for example, percentage scores or user retries.

Once the program is complete all you need to recreate another quiz is type in suitable data lines and alter the length of the loop in line 20.

columns. If you are new to the system, you may find that you can only get access to a limited area within the board, but as you prove yourself, the SYSOP will open up more areas for you. The bulletin board is an interactive thing, please contribute to it, don't just log on and read messages, put some in yourself, help it work. There must be something you can say, or some problem you want answered or someone you would like to contact. If you are adventurous, you often find phone numbers of other bulletin boards, some are on the continent and they even go as far as Australia. Though I suggest a large glass of the amber nectar before you contemplate how much that might cost in phone bills! When you log off the system, do say Goodbye properly, the system will feel happier if you do, and it will reset more quickly for the next caller. If it is your first time on, leave a message for the SYSOP (the SYStem OPerator) telling him something about yourself and your machine, it all helps the system be more useful to you, and for him to put you onto new parts of the system.

Well now that was successful, now for something completely different. You have been given the phone number of your local PRESTEL computer. Setting yourself up for 1200/75, you boot your PRESTEL emulation program (You will not get any sort of meaningful display unless you have such a program), and dial the number. Ah we have the tone, and when you switch on your modem, you get the characteristic low tone from your end. The carrier light comes on, down with the phone, and the screen comes to life. But what is this, 'CUSTOMER IDENTITY PLEASE'. Oh dear, you forgot to join PRESTEL didn't you, still never mind, all is not lost. Enter '4444444444', this is the identity for non-members, it then asks for your 'PASSWORD:', well we shall try '4444', it works, and we are greeted by the demonstration database. Of course if you had joined PRESTEL or one of the CUG's, then we would be into PRESTEL properly. If you get your identity/password wrong, it will let you try to put it in three times, and then hang you up. The system is pretty easy to use, as most pages have menus that simply need a one or two key press to proceed, but Prestel however is funny, and asks for page numbers the rest of the time if you want to jump about. To enter one, you must first enter a '*', then the page number and then finish with a key you would not expect to have to press. It will also ask you at other times to press this key. It calls it '#', but it is not really a hash as we know it, and so Prestel emulation programmes will change one of its keys to a Prestel '#' to make life easier for you. Vicom for instance uses the normal '#' key, but Data Highway, assuming this is a key you are going to use often, and as it is really Prestel's 'ENTER' key, reconfigures the <CR> key to '#'.

Well that was enough of that, lets hang up. No don't just hang up the phone, sign off properly with *90#, you don't want to be left paying any charges after you have rung off do you?

We seem to be getting quite bold now, so lets try The FORCE, or as lesser users know it, BT GOLD. We have been learning fast, and have subscribed to it already. The SYSOP has sent us our manual and welcome pack, and off we go. We need the normal terminal programme for this, so in it goes. We are getting good at this, and have remembered to change the modem to the baud rate we want. First time this should be 300 baud, till you get used to the 'Sytsem'. We dial up the GOLD directly, or PSS if we live outside London. PSS is a funny thing at times, and downright unfriendly at first sight. Nothing appears on the screen, we have a carrier, the light on the modem says so, but nothing.

Back to the manual. Ah we have to 'wake' it up. So we type <CR><CR>D1<CR>, if this does not work immediately, try again and

Continued on page 19

# THE HOTLINE

## Make your mind up time.

I hope that I can reach you, the reluctant BASUG member, the one that joined during an exhibition because you were still trying, almost without hope, to find a way to stirring your Apple Computer into productive life. Your only contact with the club is it's magazine but your not really sure if it's monthly or bi-monthly. I am hoping to catch your eye before you put the magazine on to the "I will read it another time" pile.

Should you dig into your pocket and find this next years membership fee ? The answer is **YES**. Don't miss out as I nearly did by giving up because the club seems only for dedicated enthusiasts who appear to be able to pull their machines apart and put them together again in their sleep, who make up programmes - that run - like we fill in our season ticket forms, who talk in a language we only two-thirds understand. Of course these people exsist in the club - a voluntary group could not exsist without them, but it is for folk like you and I.

If you have problems phone the HOT LINE - Monday to Friday between 7p.m. and 9p.m. It works, they actually follow up, answer your questions, find you the answers if they don't know, point you in the right direction before you give up, ask for the help you hoped for by ringing the hotline, you will be surprised, it will prove well worth this years membership fee.

T.J.Ricketts. Member 1020

### ANOTHER GOOD IDEA
**by William G Watson**

### MOUSEPAINT

**ONE**
Use the PRODOS USERS' KIT to convert your DOS 3.3 graphic files to PRODOS so that they may be loaded into MOUSEPAINT and edited.

**TWO**
Convert your PRODOS based mousepaint graphic files to DOS 3.3 with the PRODOS USERS' KIT and use PRINTOGRAPHER , ZOOM GRAFIX, of similar to dump them to your printer.

**THREE**
A program is now available called TRIPLE DUMP which is under PRODOS and is similar to the printer dump programs mentioned above. This will enable you to print out in a variety of densities and sizes by directly accessing the MOUSEPAINT data disk graphic files.

again. At last it comes back with a message. Bit of gobbledook that, but never mind must mean the port we have entered, but it says NUI?. That means you must now enter your PSS Identity. You seem to remember it was 'NTLGOLD123XYZ' or something like that, it is all in your welcome pack so you copy it on to the screen. What now, it says NUA? what on earth is that, if the NUI? was the identity, this must be the address of GOLD, so you type in A2190987654321 (I must learn it off by heart sometime). Success, we have the title page of BT GOLD, but it is now asking for your personal password. What was it again, ah yes, BSG005. In it goes (Ed. Phew ... at least that one is not secret). Now it want's still more, never ending this it seems, so in goes your personal password, and you had remembered not to use your first name, your wife's first name, your birthdate, the name of your cat etc. Don't give a hacker an even break!

At last, your there, what a performance that was. Joe Clever Cloggs, got there ahead of you though, he used a 'MACRO'. A MACRO, what is that? Then you remember that manual, it told you all about it in chapter 5. All he did was load the macro, press one key and all that question/answer performance automatically happened before his very eyes. Looks easy, and even if it did take time to understand how the macros are constructed, was worth it, as they only need to be prepared the once. If a macro 'sticks' on PSS at the start however, entering <CR><CR>D1<CR> from the keyboard, usually starts it off again.

The FORCE tells us there is a message 'Unread' waiting for us, so remembering from our FORCE manual that MAIL READ UNREAD<CR> will bring it up. We try, and there we are, a welcome message from the SYSOP. We 'REPLY' to thank him, and then 'DEL' to remove it, we don't want to keep paying storage charges on that one ... Now we SEND a message to our friend BSG999, and when done we QUIT the message area, and the system. But wait, we still have the '>' prompt, how on earth do we get off the System? QUIT doesn't work, BYE doesn't work ... of course, the manual again, it is quite simply OFF.

However all that does is give us a message saying how long we have been on the FORCE, we still have the carrier light on, we still seem to be on line. PSS thinks we might want to go on to someother database, so it leaves us connected, we must 'hangup' the programme or the modem or the phone, that will do it.

These notes should help you over some of the complexities of the various systems, they can be rather daunting first time you encounter them, especially as they all seem to work in a different way. But are not too difficult. Persevere, and do ask the SYSOP for help if you get stuck. Also the Hotline can help, or ring myself if you are a member of BASUG. We are a self-help group, and we can spread the expertise where it is needed to give help over problems that arise, and to give us all more from our machines.

One final thing I should mention, PRESTEL has a lot of information on holidays and travel. It might be advisable to look at their pages and to book yourself a long holiday in the sun. You see, you will not be too shocked at your bill from the FORCE. But when you have paid that, you might wish to leave the country before you get your BT bill. They have a nasty habit of going beserk when you get a modem. MUD addicts note (that's another subject .. come on someone write about it!), if your bill goes over £130 or so a quarter, and your an insomniac, join NIGHTLINE. For £125 to install, and £95 a quarter, all your phone calls wherever in the world they may be, are free ... as long as they are made between 12 midnight and 6 am. This may sound drastic, but I did hear of one addict that got a quarterly bill from BT for £900 .....

end

*Think's..... have I ordered those disks from BASUG?*

## Small Ads

Free to members

**For sale or swap** Apple III, Profile and software. Wanted Apple ][e & Drives.
Contact :- Jim Watson on Margate [illegible]

**For sale.** Ormbeta Accounting Package. Hardly used, cost £472. Reasonable offers to:- Mr Brooke on [illegible]

**For Sale.** Centronics 737 Printer with Interface £135. Hitachi 9" monitor £25. All in excellent condition. Can be demonstrated.Contact Mr Skipp on Loxwood [illegible]

**Required:-** Access III communications software for Apple III. Alternatively any other suitable comms software. Contact Paul Grundy on [illegible]

**For Sale:-** ProDos Users Kit, inc Manual. Used once - as new - could arrange swap. £30. **Wanted:-** Basic Programming with ProDos manual & Disk. ProDos Tech Ref Manual. Beneath Apple ProDos Book. Contact:- Phil King on [illegible]

**For Sale:-** ITT 2020 48k Machine in good order with manuals £120. **Wanted** :- Videx 80 column card manual. Fortran 80 Manual, Nibble Vol 3 No 1. For further info phone: [illegible]

# NEWS

Apple have announced new hardware and software products for the Apple II range, they include :

1. THE UNIDISK 3.5" floppy disk drive with a storage capacity of 800k, offering five times the capacity of the old Apple 5.25" drive this must surely be exciting news to Apple II, II+, and IIe users, provided that Apple's pricing policy is sensible. n.b., DOS 3.3 programs will not work with UNIDISK.
2. APPLE II memory expansion card to provide in excess of 1mbyte internal memory on the II, II+ and IIe. The card is said to be designed to automatically accept data or programs as soon as the machine is turned on. Modified versions of ProDos and DOS 3.3 can use the card as a RAM disk. n.b., modified Pascal programs will utilise the card and UNIDISK.
3. COLOR MONITOR IIc is a hi-res colour or monochrome monitor.
4. MOUSEDESK is a utility program and operating system which utilises the mouse to switch between programs which have been loaded into the UNIDISK or expansion card. File movement, deletion, renaming and copying can be done via the mouse. ( nb Mousedesk is not an Apple product ).

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Price reductions announced by Apple have cut £705.00 from the price of a IIc outfit ( comprising 128k IIc, carrying case, two disk drives, monitor and stand. color modulator, Mouse IIc, Mousepaint Graphics software, and Appleworks ).
The IIc liquid crystal display can be added to the package with a price adjustment to £1,395.00.

The 512k Macintosh is reduced by £600.00 to £1,995.00, while the 128k Mac receives a cut of £100.00 ( to £1695)

Laser Writer printers are subject to a cut of £1000.00 bringing them to £5,995.00. All very good news and hopefully a sign that Apple's pricing policy will be more realistic in future.

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More gossip indicates that Apple's price cuts are causing some software houses to think twice before giving the Amiga a lot of their time.

So Jobs has finally gone from Apple's organisation, pity that his departure looks as if it will be accompanied by various kinds of legal nastiness ( $5 million lawsuit filed against him by Apple).

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Apple's battle with the Taiwan pirates continues and has resulted in sentences of six months jail for six Taiwanese "businessmen ", unfortunately Taiwanese justice allows the sentences to be converted into fines which work out to about £30.00 equivalent for a six month sentence.

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PCW's Yankee Doodles quotes Bill Gates as saying " we once thought Macintosh would account for half of our retail application software sales, but that was based on the assumption that Apple would do a good job ". Microsoft are making less than anticipated from their commitment to the Macintosh.

---

A software author, Dave Winer of Living Videotext, has stated that Commodore's support for their development machine compares badly with that provided by Apple's support of the development Macintosh. Although he says that the development Macintosh didn't work either he adds that Apple provided the support of five engineers during development, the Amiga is not supported in the same way.

Digital Research have had their hand smacked by Apple over the GEM Macintosh look-alike. Digital have guaranteed that they will immediately modify the GEM program so that it will be "substantially different from the Mac environment in both operation and screen appearance ". Digital will have to satisfy Apple that their programs will not ape Apple in future, and to disclaim any compatibility between Apple's products and theirs.

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## EPSON®

Epson's catalogue for 1986 contains a printer which should be on sale for about £200.00 while producing better print quality than a daisywheel. The printer is said to have a maximum printing speed of 200cps and has graphics capability. Should be a lot of very good bargains in the near future as current models of printer are cleared out.

---

A new publication called " Warehouse Computing " is to be launched by Turret-Wheatland Ltd ( the people who publish Storage Handling and Distribution ). Anyone interested should contact them at Penn House, Penn Place, Rickmansworth, Herts., WD3 1SN.

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Jazz sales which rocketed in June have slumped badly, said by dealers to be the combined effect of its cumbrous lack of speed.

*I ain't got enuf fingers for Hex.*

*How about using your teeth, as well?*

## British Apple Systems User Group

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Ring 0727 73990 for Access or queries

---

**Offer of Help to:-**
**All ITT 2020 & Basis 108 Owners**

If you own an ITT (still) and ever more convinced that you should change your machine for an Apple, you need to know that your reasons are probably based on lack of information.

Indeed, there are very few things that your machine cannot do! So do write in explaining any problem, hinderance you are encountering and I wil do my best to give you the answers.

Further more, if there is sufficient response I will put a disk together for the Software Library for all interested parties.

Please reply to I.Zaneboni c/o BASUG

# GAMES PORT EXTENDER

We are all wary of opening up our favourite machine and plugging things into the sockets. I myself have had a few disasters after enthusiastically removing a card while the machine was still switched on. Applesoft ROM's don't come cheap!

If you play any games extensively, or use any of the graphic packages, you don't want to be constantly changing your paddles or joysticks from inside the machine, as you can so easily bend the pins or damage the socket poking about in that corner of the motherboard.

Enter the 'Game Socket Extender'. These have been obtainable for some time, but are now getting increasingly difficult to find, and they are very expensive! So why not make your own. It is quite easy, and you don't need many bits and pieces to do it. For the simplest one, you will need
a) 2 X 16 pin DIL sockets.
b) 2 X 16 pin IDC plugs.
c) 1 X piece of Veroboard.
d) 1 length of 16 way ribbon cable.

If you want the pukka job, then you will need a 16 pin ZIF socket instead of one of the 16 pin DIL sockets, and you could add some more pieces as well.

All we are trying to do, is to extend the socket from the inside of the Apple to the outside. How far away you want to put it will govern how long a piece of ribbon cable you will need, but a piece 24 inches long, should be ample for most people. The cable must have a DIL plug fitted at each end. You can buy the cable like this at some shops, but they are easily fitted yourself.

Take one of the two 16 pin sockets (you could use an old socket for this), carefully take apart the DIL plug, fit the plug into the socket to protect the the pins and place the clean cut end of the 16 way ribbon cable (you can split wider cable with a pair of scissors) across the plug.

Put the top back on the plug, and using a flat piece of wood to spread the load, hammer the plug top in position till the cable is home. Do the same to the other end making sure that you have the two plugs the same way round, that is pin 1 of each should be to the same side of the cable, this is often marked by a colour strip.

Now take the piece of Veroboard. This should be at least 8 tracks wide by 12 holes long, enough to take the 16 pin socket and one of the 16 pin DIL plugs with at least one row of holes between the two. Drill or cut out the interconnecting strip from under the socket and plug and between the plug and the socket.

Solder both of them, side by side to the board leaving at least two holes between the pair, and with the tracks running across the board between the two. You will now need to wire all of the pins up so that the each hole on the new socket corresponds to the pin on the Apple socket. This simply means pin 1 of the plug must be connected to hole 1 on the socket and so on for all the 16 pins, though remember to look at them both the same way up! Use thin wire, or self fluxing enamel wire to connect the pins.

Plug the free end of the ribbon cable with its new plug into the Apple games socket and close the lid. You did remember to switch off first didn't you? Mark the free socket so that you know which way round to put in the paddle/joystick plug, and stick the whole device on the side of your Apple with a piece of double sided sticky foam pad. This also protects the wires from accidentally touching any metal and shorting out.

For the real pukka job, you should use a ZIF (Zero Insertion Force) socket instead of a 16 pin DIL socket. These cost between £4-£5 pounds each, but make it easier and safer to remove and insert the plug of your paddle/joystick. The whole thing can be mounted in a box, to give you a wandering socket, and you could make the cable up to 4 feet long if you wanted.

Those adventurous souls amongst us, may like to make a neater job of the extender, by etching their own board, and thus avoid the messy wiring problem. You will need a piece of clean single sided copper board, and some PCB transfers to do the actual wiring. These transfers come in various styles, some with the pads already laid out in rows, and you can get interconnecting strips as well. You will need the type that allow a strip to be led through between the pins. It is quite easy to lay out the tracks to link between the pins, remember pin 1 to hole 1 etc. Next you must etch the board with Ferric Chloride, and then drill out the holes before soldering the sockets into place. PCB etching kits are available with full instructions from some shops.

Parts are available from many shops or commercial component firms, such as Maplin, RS Components and Farnell. Maplin has retail shops in London, Southend, Manchester, Birmingham and Southampton, though they also do mail order supplies. They have a mammoth catalog which you can get from many newsagents.

| PARTS REQUIRED: | Optionally: |
|---|---|
| 2 16 pin dil sockets. | ZIF socket |
| 2 16 pin IDC plugs. | PCB transfers |
| 24 inches ribbon cable | piece copper board |
| 1 piece Veroboard | PCB etching kit |
| connecting wire | Phot sensitive PCB |

# LOST DOS

BOURNEMOUTH

Dear Sir/Madam,

Experienced Apple users should read no further, but I hope this may be of use to those who, like me, need all the help they can get!

We've all done it! and will probably do it again! - Typed in lines of Applesoft programs and then discovered, for one reason or another, that DOS is not in memory, and we cannot Save the program.

All is not lost however! The program lines can be moved to an area in memory not affected by the booting of DOS and then moved back to the correct place when DOS has been installed.

The only information required is the length of the program and can be found by 'peeking' locations 105 and 106.

So, in order to save a program when DOS is not in memory it is necessary to enter the following commands at the keyboard:-
('return' at the end of each line)

```
1..  PRINT PEEK(105) (make a note of
2..  PRINT PEEK(106) (values obtained
3..  CALL-151 (to enter the monitor)
4..  4000<800.1800M (move to safety)
5..  Control-C (back to basic)
       Now insert an initialised disk
6..  into Drive 1 and PR£6
7..  CALL-151
8..  800<4000.5000M (move program back)
9..  Control-C
10.  POKE 105,X (where X/Y are values
11.  POKE 106,Y (from actions 1 and 2.
```

DOS is now installed and the program can be saved.

Notes:-
Locations 105 and 106 hold the pointer to the end of the Applesoft program currently in memory. If these are not reset they will contain the values relating to the 'HELLO' program on the booted disc.

Lines 4 and 8 move a block of memory $1000 long (which should cover most eventualities). The values in location 105 and 106 may be used to determine exactly how much space is used by the program if required. Space available unaffected by the booting of DOS is between 4000 - 9D00 which is quite a lot of room!

I hope this may be of use to someone!

Yours faithfully

Roger Deacon-Smith

# Courses 1986

The following course have been arranged for the first part of 1986. They are all professional standard courses with the USER in mind. The courses will include all manuals and a high level of supervision with tutors who KNOW the subject.

**Spreadsheet Design with Visicalc & Multiplan.**
**25th January - 18th April - 10th May 1986**

**Multiplan on the Macintosh.**
**8th February & 22nd March 1986**

**Around Appleworks.**
**5th April 1986**

**Word Processing & Presentation.**
**24th May 1986**

To book your place or for more details ring the Course Manager - Peter Dalton on

[redacted]

**Mutterings.**

Apple have been known to make major new product announcements at the Annual Share Holders Meeting - this is due shortly.

I feel that something big wll be announced, they have had over a year without any really major new products. The wispers are that now Steve Jobs has left for pastures new the Macintosh will be opened up with a new design and more third party hardware involvement.

Also there is talk in the States about a 32-bit Apple ][. Apple could find a market for a really good dual proccessor machine.

Whilst all this happens we will sit here in the U.K. about a year behind the U.S.A.

Hopefully the Apple-Fest in March will attract some of the newer products for the membership to lay their hands on.

Over the last six months many new Apple ][ programs have been released in the States, many have not survived the crossing because from our research many are not being offered for sale in this country. We are busy writing to the suppliers in the States to find out what we can get hold of.

Some of the more recent products available are out of this world. Things like Newsroom - Dazzle Draw - Blazzing Paddles and the like - the Apple ][ still lives on and the improvements are quite outstanding.

**LONG LIVE THE APPLE**

**ANOTHER GOOD IDEA**
**by Dave Ward**

**NON-STANDARD 80 COLUMN CARD**

This program has been written for those people who use PRODOS and the editor / assembler from the DOS TOOLKIT and who have a non-standard 80 column card.
Just call this program STARTUP and use it to activate your card.

```
10 FOR M=0 TO 8: READ B:
   POKE 768 + M,B:NEXT
20 CALL 768
30 PRINT CHR$(4)" -EDASM.SYSTEM"
40 END
50 DATA
173,152,191,9,2,141,152,191,96
```

# DS3 — A MUSICAL UPDATE

About two years ago an article appeared in Hardcore, written by myself and John Molloy, on the graphics language Ceemac. The same issue included an interview with the band Mainframe, John being 50% of the group. About a year ago, Bob Raikes wrote an article reviewing the DS3 system for the Apple ][+ & ][e.

This article is intended to bring the story up to date, both in terms of technical and musical improvements to the DS3 system, and to report on the latest gossip in the Greengate and Mainframe camp(s).

First, a bit of history, for those who have never heard of us (I hope you're both paying attention! ).

Three years ago, BASUG were present at a computer event in connection with Information Technology Year, in Hemel Hempstead. I was (and am) an owner of a Mountain Computer Music System. This system is perfect for any musically inclined person who has a decade or so to spare, and wants to enter their own or someone else's creation. So, I was more than a little pleased when Norah Arnold (a fellow sufferer ) introduced me to John. He too owned the aforementioned music cards (he does now, but can't find them! ). As a coincidence, John also met Dave Green on that historic day. More on him later.

As things worked out, we didn't talk about music very much during the time we were becoming friends. This was because John, and Murray Munro (the other 50% ) were working on an album, later to be called 'Tenants Of The Lattice-Work", and needed someone to do some computer graphics for a video for this album. Almost as a warm up to this task, I became involved with Mainframe concerts, actually producing graphics live with Ceemac and my own routines, plus Apple World and one or two other visual programs. All on the Apple ][+, (well, sometimes 3 of them ) aided a little by an Accelerator card.

Meanwhile, back in Berkhamsted, steam was seen coming from a bedroom window.....

The video took a little longer than expected (see Guiness Book Of Records for precise details.), which suited me, 'cause given important deadlines, bribes, treats, bribes (I like bribes ) life or death situations, I still tend to be a touch slow in developing software. However things went OK in the long run, and we ended up with a 42 minute video, containing about 7 minutes of Apple generated graphics.

While some of this was going on, other things were afoot. John and Murray's neighbours had actively encouraged them to seek alternatives to real drumkits. This caused John to persuade Dave Green to develop something good. Dave (the noise maker of Northchurch ) had designed a Sound Sampler! Having adapted the hot water version into the form of an Apple peripheral card, Dave was able to give Mainframe the ability to produce lots of loud drumming, without the locals throwing bricks through the window (so they could hear better, I think).

A month went by. Then another month passed, and soon after, another. Before we knew what had happened, it was three months later. A warehouse in London was using 2000 pieces of circular plastic to prevent dust from settling on their shelves. And Dave had modified the sampler with no name to work with a keyboard!

This caused immense interest with local musicians. Not only that, but it got written about in Melody Maker! People started to ask if they could come for a demo. One man even ordered a system. We thought 'perhaps we should make a few more'. For interest, and to give myself another name check, the name Greengate is derived from dave GREEN and colin holGATE, and was thought up by Rod Munro, about 2 secs after our first customer said ' who do I make the cheque out to? '.

Apart from being Murray's father, Rod was head of outrageous claims for Mainframe, and is now our Managing Director. Often heard saying 'oh delivery's no problem, we'll send it to you yesterday' .

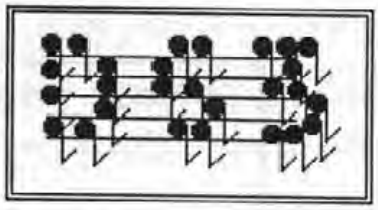
So, here we were. By the time we had sold 25 or so, Bob Raikes was writing his article on the DS3 for Hardcore. By the way, DS3 stands for Digital Sound Sampling Sequencer. Easy to see why we abbreviated it! . Bob did comment on some shortcomings of the system, most of them have been purged since then, of course!

When we started to produce the DS3's, Dave collected all of the routines from all of the disks he had generated since the sampler first sounded, threw away a lot of it, and ended up with a system disk. John and Murray sampled all of their drums and other instruments, ending up with two sound disks to accompany the system disk.

We had to release the software at that point in it's development, even though we had further ideas that had not yet been installed into the system. Rather than have customers waiting for the other features to be included before buying a system, we settled on the idea of free updates, well, a nominal cost to pay for the disk and postage, etc. This was intended to cover the next 3 improvements to the software. We still have more features to put into the system, and have just extended this offer to 4 updates.

All of this means that the software reviewed by Bob is now 3 issues out of date. And now for some undiluted sales blurb.....

The DS3 system is a (think of an American voice while reading this.) digital sound sampler for the Apple ][ series of computer, excluding the ][c. Once plugged into slot 5 of your Apple micro-computer, the DS3 will enable you to record real sounds into the random access memory, edit the waveform and save it on a standard DOS 3.3 format diskette. In addition, the DS3 (I'm beginning to believe this...) system has powerful sequencing capabilities only matched by other systems costing 5 to 6 thousand times the price.....



Enough of this. Back to english. Most of the records you are likely to hear on Top Of The Pops, and a lot of the ones you won't, use computer based systems that can sample sounds and use them in sequences. In a studio this would allow you to enter a tune or rhythm into the computer, and replay it at any speed and with different instruments, safe in the knowledge that it will play the same way every time. This can save a lot of studio time and money. The equipment used to save this money can cost quite a bit itself, and so only larger studios can afford to buy them. A musician who is trying to record at home or in a small studio would also like to save time in this way. By using the Apple as a host computer, instead of a dedicated computer system that has no other function, we can compete with the big boys, and at a lot lower price. This is one of many examples of areas that the DS3 can justify it's existence.

Continued on next page

For those of you who are interested in using a DS3, I'll go through the improvements we have made to the system since Bob reviewed it.

The first update we released included keyboard splitting software. Until then you could only play one sound on the 5 octave keyboard at a time. This wasn't too limiting as any sample could be selected to be played on the keyboard. However, with splitting you can have different parts of the keyboard playing different samples. Apart from the advantages in live playing, this also allows you to spread several samples of the same instrument across the 5 octaves, to set up a more realistic recreation of the original instrument. The software also had a modification to the sampler program that gives two sample rates instead of one. The new, lower, sampling rate is of lower quality, but can still be used on many sounds, and gives twice the sampling time.

The second update had a totally revamped sequencer. This is far more informative, showing instruments, sequences occupied, sequences currently playing and a matrix showing instrument name against channel number. The keyboard could be disabled on any of the four channels. This is useful when entering monophonic instrument tunes. A new system of subdividing the tempo was added. With this it is possible to set one tempo rate, and yet still work with lower tempos by only recording on every {n} events. If you decided to enter a part of the tune that runs quicker than the tempo you have set, you would be stuck with the older software, but with the new method you can start with a lower tempo, and alter it as needed. The sequencer can also record the duration of the note being pressed. Before it was only possible to record the pitch and voice. The other main feature of this release was the ability to play 'looped' sounds. A looped sound is a normal sound that repeats a center section over and over, thus allowing you to hold a chord for as long as you wish. The sequencer can record this time, as per duration.

The third update was intended to be a step-time sequencer, but we had developed enough other things to justify another update. Step-time will be in the fourth update. Meanwhile, the third update, which is the current software, includes a transpose feature. A tune can be played into the sequencer, and then replayed by pressing any one of the keys on the 5 octave keyboard. If the A above middle C is pressed the tune will replay in key. If a different note is played the tune will replay, but transposed to match the new key, relative to the A key.

The current sequencer can be set to run at 4800 events per minute. Previous software could only be set to 1800. This speed gives a more realistic real-time feel, and better duration recording.

The terms step-time and real-time are common in music these days. A step-time sequencer will take in notes at any rate, and still play them back at a regular rate. The user only has to get the pitch right. With real-time the sequencer records exactly what you play, including any timing faults. The DS3 sequencer is a variation of this type. It is a real-time sequencer, but does include an auto correction to the nearest event. That way if you play more or less correct timing, the sequencer will lock it spot on.

In addition to the improvements to the standard system master for the DS3, we have brought out a couple of other goodies. The first of these was Loop Create. With this program you can design your own sound loop points, thus creating a sound that will hold down successfully in the sequencer. To assist you in finding loop positions, there is a 3D plot, a difference waveform and even an auto loop finder. The general idea is to find two parts of the sound that have waveforms that differ as little as possible, so when the sound is looped it will sound as though it was continuing.

More recently a digital delay line disk has appeared. By sampling into a buffer held in memory, then playing back a sample from the end of the buffer, it is possible to use the DS3 to act as a delay line. If this delayed signal is fed back into the DS3, along with the source sound, echo can be achieved.

We have added a couple of new cards to the system. One of these is an eprom blower. This comes with software that modifies a normal sample into the form used by drum machines. Many of our customers use such drum machines, and can now sample their own sounds and replace the ones in the drum machine.

The other new card we have released is a MIDI card. MIDI is a serial communications system for musical instruments, and is used to synchronise or control one MIDI device with another. Now that the DS3 has MIDI we can record sequences and live playing originating from a MIDI keyboard or sequencer. In addition to supporting MIDI, the card also has the ability to control the volume of each of the four DS3 outputs. This gives the system touch sensitivity.

Away from Greengate for a minute, John and Murray have signed a recording contract with Polydor, and have already had one single on release called '5 Minutes'. This went up in the charts to 92 in Britain, and 32 in Holland. It is, as I type, on release in other countries, and hopefully by the time you read this, the second single will be on release here, and J & M will be really rich!

The records made by Mainframe act as good demos for the DS3, and they also push the system to it's limits. Through this pushing, and with suggestions from our customers, we have a clear idea on where improvements are required.

We have always had to defend the Apple II against the 'why not the 64 / Amstrad / BEEB / Spectrum' brigade. This has been relatively easy due to the Apple's slots, and general reliability. However, we want to go further in sampling, and intend to produce longer sample times, higher quality and more system features. Even though new ranges of dedicated sampler keyboards are being produced by other manufacturers, we intend to remain in the lead which we have created in the field of 'system' based samplers.

The argument 'you can word process on it, or play games...' isn't sufficient to convince a musician to go for an Apple based sampler. What we need is a system that can do more than the Apple will allow. On the other hand, we have quite a number of users who would be very pleased should we stick with the computer they already own. Due to this, and the fact that we like working with the Apple, we are producing an extra box that contains the Next Device. This is intelligent, with it's own memory, extra voices, more outputs and yet still controlled by the Apple. We can still provide the power of hi-res waveform editing, storage and sequencing, and have better sound quality than the Apple memory could support.

So there we are: How it started; how it's changed, and what next of Greengate Productions. Amazing what can develop from a BASUG meeting!

end

# LETTERS TO THE EDITOR

Dear Sirs,
..... I would like information on a program called KERMIT which is an intercommunication control program. I am interested in the transmission of textfiles from a BBC model B to the Apple ][+, and possibly vice versa, and would be grateful for any advice on the problem.
Sincerely,

Richard Knox,
Penzance,
Cornwall.

Dear Mr Knox,
You do not state exactly how you wish to transfer files between an Apple and a BBC, so perhaps the following points may help you.

1. KERMIT is a particular protocol transfer that exists on large mainframe computers such as are used by Universities etc. The protocol also exists now on some communication programs for microcomputers.

2. XMODEM is a similiar type of protocol, and is used mainly by microcomputers for transmission of files over telephone/modem links. It is included in many terminal programs used by microcomputers ans bulletin boards.

3. If you wish to simply transfer files between two machines of whatever type, that can be hardwired together (without the use of the phone network), then it should not be necessary to use a protocol transfer. If your the phone network, or long cable distances, are involved, then a protocol transfer will keep data integrity.

4. To transfer between machines, it is necessary that each have a RS232 or serial port, and that you have some form of terminal program for each, that will allow file spooling or transfer. This kind of program is sometimes built in to the machine, though not however in the Apple or BBC. It is not important how complex the program is, just that it will alow spooling, or have XMODEM if you will need protocol transfer. Most terminal programs have at the least these facilities.

5. For the BBC, there are various terminal 'ROM's' on the market that would fit this requirement. One such is 'COMMSTAR'.

6. For the Apple, there are many terminal programs easily available. 'ASCII EXPRESS PROFESSIONAL', 'DATA HIGHWAY', 'VICOM' etc.

7. There are some programs designed specifically for the purpose of transmitting from one machine to another, and there is even a program for the Apple that will allow the reading and writing of BBC 40 track discs. I do not know its name, but I am sure someone can oblige. The advantage of buying a proper terminal program, is that the XMODEM protocol transfer, will usually be built in to the program, and if you wish to access any databases such as PRESTEL or TELECOM GOLD, or even bulletin boards, then you will have all the facilities you require.

I hope that has answered your problem. As far as I am aware, KERMIT does not exist on any programs for the Apple II series, it is however available for the MACINTOSH.


## FUNDATA LIMITED.

Do you have a VIDEO RECORDER?

If so, then you need the VIDEO TAPES INDEXING SYSTEM, available for the : 48k ZX Spectrum
32k BBC model B
48k Apple II

It not only tells you where to find the programme you want, but also tells you on which tape you have enough spare space to record another programme. Your tapes are expensive so use them efficiently with this computer program which accepts any video system(e.g. VHS & BETAMAX)

Just send a cheque or postal order for £7·95 to the address below. Please also state your name and address, which computer you have, and whether you require the disk, tape or ZX microdrive version.

Fundata LTD, PO Box 73, Pinner, Middx, HA5 3PR


### ANOTHER GOOD IDEA
### by William G Watson

### FORMAT - 80 WORD PROCESSOR UNDER DOS 3.3

Users of FORMAT-80 would find it worthwhile to have a look at how text files are stored in the CATALOG.
Within the SAVE function one is asked for PAGE and PAGE NUMBER.
This information is grabbed by the program and a file is stored in the following form : -

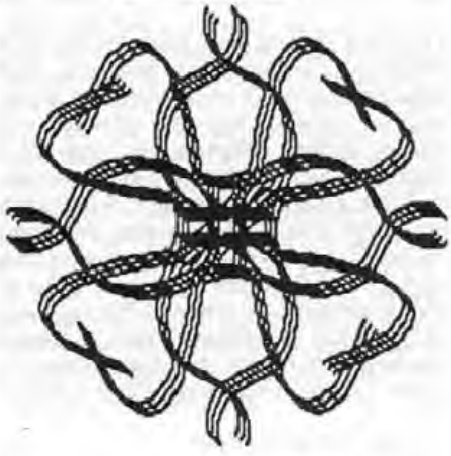
**TEXT.NAMEOFPAGE.01**

where there are ten characters between the periods which in its own right would be recognised as an APPLESOFT filename.
The ending two digit number is the PAGE NUMBER. When one CATALOGs or LOADs through FORMAT-80 the program looks for those filenames that begin with **TEXT.** and selects those for screen display.
Because of this it is possible to RENAME textfiles created by other word processing packages to be accessed by FORMAT-80. I convert files created by ASCII EXPRESS PROFESSIONAL and APPLEWRITER //e.
Why should I want to do this ?
When downloading messages from my mailbox on THE FORCE I save files in the following forms : -

**TEXT.1234567890.01**
**TEXT.1234567890.02**
**TEXT.MESSAGE^^^.01** etc.

The header to a message sent to me on **THE FORCE** tells me the number of lines in the message and I have to be conscious that although I can save a message in excess of 80 lines to a data disk I cannot then use FORMAT-80 to access it

Having saved my files in the above forms I can then edit my messages using FORMAT-80, a word processor with which I am most familiar. Likewise it is worthwhile pointing out that textfiles on a FORMAT-80 data disk can be accessed by other word processing packages and that the data disk on which one stores FORMAT-80 textfiles may be a standard DOS 3.3 formatted disk.



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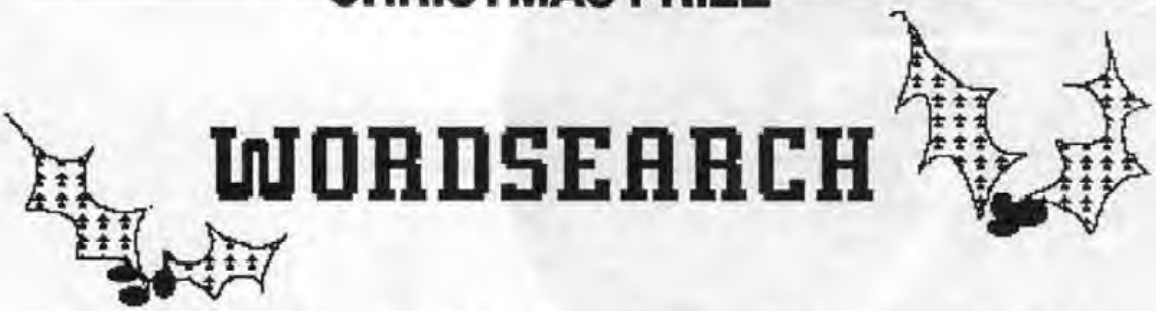

# WORDSEARCH

C H I P S A G T E P I D M
O O F S M K N B J Z A O E
N D M K V I E W O T J E M
F G A P R O G R A M L C O
I I N P U T U D P O R E R
G B Q A N T B C L U B R Y
U M S U I K E A G S Q A I
R L J B Y T E R J E O W T
E V C A P P L E M S R T B
J D I S K A H K P O G F L
B U H I M O D E M I D O H
E R O C I R C U I T C S E

© Emma Dalton

This wordsearch is all about computers; it has many hidden words but all 2-letter words are excluded. There is a prize for the first entry opened after the closing date January 5th and containing the most words. The words are arranged horizontally, vertically & diagonally in either direction.

GOOD LUCK !

All entries to : BASUG WORDSEARCH
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Goods to the value of £15

# LOCAL GROUPS

**LONDON GROUP.**

Dates - 1st Thursday each Month @ 1800
Venu - Room 97 - County Hall - SE1
Organiser - Abe SAVANT [redacted]

**CROYDON APPLE USER GROUP**

Dates - 3rd Monday each Month @ 2000
Venu - The Shirley Poppy Pub, Wickham Road, Shirley, Nr Croydon.
Organiser-Graham ATTWOOD [redacted]

**FURNESS GROUP**

Dates - Ring Organiser
Venu - Ulverston or Barrow.
Organisers - Alan CURTIS - [redacted]
or Tom IDDON - [redacted]

**BIRMINGHAM GROUP (MIDAPPLE)**

Dates - 2nd Friday each Month @ 1900.
Venu - I.T.E.C. Tildasley St. West Bromwich
Organiser - William WATSON - [redacted]

**ESSEX GROUP**

Dates - 1st & 3rd Wednesday each Month.
Venu - 1st Wed @ The Top Hotel, Epping.
- 3rd Wed @ Havering Technology College, Hornchurch.

**HANTS & BERKS GROUP**

Dates - 2nd Monday each Month.
Venu - F.U.R.S. Building, Reading University.

**HARROGATE GROUP.**

Venu - The New Inn, Burnt Yates, Nr Harrogate.
Organiser - Peter SUTTON - [redacted]

**KENT GROUP**

Dates - As arranged - once a month.
Venu - Various in Kent.
Organiser - Dougal HENDRY - [redacted]

**HERTS & BEDS GROUP.**

Dates - 1st Tuesday each Month.
Venu - The School, 1 Branch Rd, Park Street, Nr St Albans.
Organiser - Norah ARNOLD - [redacted]

Diary of Events
The Herts and Beds Group.

Contact Norah Arnold, [redacted]

January 7th:- Databases - the pros and cons of some of the databases used by the group.

February 4th:- Peripherals in general, some of the newer monitors and disk drives.

March 4th:- Utilities, both for Apple and Mac - to include such things as Copy II plus.

April 1st:- Swapshop:- bring along items you no longer use, they may be just what someone else is looking for.

May 6th:- Speeding things up! The Accelerator, etc.

June 3rd:- Starting machine code - How do you get started, which books are helpful etc.

July 1st:- Operating Systems:- the advantages of Pro-Dos.

August 5th:- Games:- bring your best games and a machine if possible.


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SCUNTHORPE

Dear sirs,

MAIN MENU

I wrote this short routine after years of frustration at having to design a different menu each time I started a program. I found that this detracted from the main program task and consumed an amount of time out of proportion to it's importance. Needless to say, the numerous menus I have designed vary greatly ,both in design and efficiency! Having experienced many commercially written menus I came to the conclusion that the simpler the better and I have chosen what I describe as the 'Highlighted Choice' method. Most readers will be familiar with this type of menu and will agree that it is both simple in use and very effective. My routine is loaded as a standard menu and with a little customisation will display menu options of your own choice. The menu options are displayed on screen with the current choice in inverse text. To operate the menu the following keys only are recgnised :-

| | |
|---|---|
| <- | up |
| -> | down |
| RETURN | to accept choice. |

The listing as shown will terminate the program with a 'STOP' at the line number governed by the menu option as chosen; this is for demo purposes only and of course your own program will have it's own routine here. The REM'S in the listing describe the necessary changes to be made in order to create your own menu.

Eric Sausse

```
4  REM  CHANGE VARIABLES IN LINE
     24 FOR YOUR OWN MENU (FL,BL,
     SPACE,HT)
6  REM FL=FIRST LINE TO PRINT A M
     ENU SELECTION(2 TO 22)
8  REM BL=LAST LINE AS ABOVE
10  REM SPACE= 1 OR 2 (LINE SPACI
     NG)
12  REM  HT=HORIZONTAL TAB FOR CH
     OICES(MINIMUM TAB 2)
14  REM   ENTER MENU CHOICES AS D
     ATA IN LINE 1006
16  REM  DELETE UNUSED GOTO(GOSUB
     MAY BE USED)IN LINE 52
18  REM   DELETE UNUSED LINES(LIN
     ES 101-121)
20  REM  ENSURE NO CONFLICT BETWE
     EN NUMBER OF CHOICES AND NUM
     BER OF GOTOS OR GOSUBS
21  REM   MAX LEN FOR CHOICE$ IS
     38 CHRS
22 :
23 D$ =  CHR$ (13) +  CHR$ (4):KB
     =  - 16384:CK =  - 16368: DIM
     LINE(23),CHOICE$(23)
24 FL = 2:BL = 22:SPACE = 2:HT =
     6: GOSUB 1000: GOSUB 1008: GOSUB
     1018
28  TEXT : HOME : INVERSE : FOR P
     = 1 TO 40: PRINT " ";: NEXT

30  VTAB 1: HTAB 12: PRINT "** MA
     IN MENU **";:
32  FOR P = 2 TO 23: VTAB P: HTAB
     1: PRINT " ";: HTAB 40: PRINT
     " ";: NEXT : NORMAL : VTAB 3

34  VTAB FL:C = 1: FOR PM = FL TO
     BL STEP SPACE: VTAB PM: HTAB
     HT: PRINT CHOICE$(C):C = C +
     1: NEXT
36  VTAB 23: INVERSE : FOR P = 1 TO
     40: PRINT " ";: NEXT : VTAB
     23: HTAB 7: PRINT "<- -> OR
     RETURN TO SELECT";: NORMAL
38 X = FL: POKE 41, INT (LINE(X) /
     256): POKE 40,LINE(X) -  PEEK
     (41) * 256: CALL 768:C = 1
40  POKE CK,0: REM  CLEAR K/BD
42  IF  PEEK (KB) < 128 THEN 42: REM
      NO K/PRESS
44  IF  PEEK (KB) = 136 AND X > F
     L THEN  CALL 786:X = X - SPA
     CE:C = C - 1: POKE 41, INT (
     LINE(X) / 256): POKE 40,LINE
     (X) -  PEEK (41) * 256: CALL
     768: GOTO 40
46  IF  PEEK (KB) = 136 AND X = F
     L THEN  CALL 786:X = BL:C =
     CN - 1: POKE 41, INT (LINE(X
     ) / 256): POKE 40,LINE(X) -
      PEEK (41) * 256: CALL 768: GOTO
     40
48  IF  PEEK (KB) = 149 AND X < B
     L THEN  CALL 786:X = X + SPA
     CE:C = C + 1: POKE 41, INT (
     LINE(X) / 256): POKE 40,LINE
     (X) - ( PEEK (41) * 256): CALL
     768: GOTO 40
50  IF  PEEK (KB) = 149 AND X = B
     L THEN  CALL 786:X = FL:C =
     1: POKE 41, INT (LINE(X) / 2
     56): POKE 40,LINE(X) - ( PEEK
     (41) * 256): CALL 768: GOTO
     40
52  IF  PEEK (KB) = 141 THEN  ON
     C GOTO 101,102,103,104,105,1
     06,107,108,109,110,111,112,1
     13,114,115,116,117,118,119,1
     20,121
54  GOTO 40
100  REM  LINES 101 TO 121 FOR DE
     MO & CHECKING PURPOSES
101  PRINT : PRINT CHOICE$(C): STOP

102  REM ( repeat for line nos.
          ( as in 52
1000 CN = 1
1002  READ CHOICE$(CN): IF CHOICE
     $(CN) = "O" THEN  RETURN
1004 CN = CN + 1: GOTO 1002
1006  DATA  CHOICE 1,CHOICE 2,CHO
     ICE 3,CHOICE 4,CHOICE 5,CHOI
     CE 6,CHOICE 7,CHOICE 8,CHOIC
     E 9,CHOICE 10,CHOICE 11,CHOI
     CE 12,CHOICE 13,CHOICE 14,CH
     OICE 15,CHOICE 16,CHOICE 17,
     CHOICE 18,CHOICE 19,CHOICE 2
     0,CHOICE 21,CHOICE 22,0
1008 ADDR = 768
1010  READ R: POKE ADDR,R: IF R <
     255 THEN ADDR = ADDR + 1: GOTO
     1010
1014  RETURN
1016  DATA      160,38,177,40,41,
     127,201,64,144,2,73,64,145,4
     0,136,208,241,96, 160,38,177
     ,40,73,128,201,32,176,2,73,1
     92,145,40,136,208,241,96,255

1018 N = 2
1020  READ LINE(N): IF LINE(N) THEN
     N = N + 1: GOTO 1020
1022  RETURN
1024  DATA 1152,1280,1408,1536,16
     64,1792,1920,1064,1192,1320,
     1448,1576,1704,1832,1960,110
     4,1232,1360,1488,1616,1744,0
```

(The above program is included on Disk D104 in the Library for those who don't want to key it in. GA)

apple®

February Hardcore

Features include - DIY Work Station.
Calendar Listing - Comms Updates
Hints - Tips - Product News - Reviews
MacSIG News - Xmas Prize Winners

apple™

# LIVING TOGETHER OR A FOOT IN EACH CAMP

I know of no more pleasant activity than using my rather primitive digitizer board in my **Apple ][**. It was originally designed for surveillance and leaves a lot to be desired. I fiddle about with the camera and the lighting in order to get better definition, never quite satisfied with the result. Every few minutes I deliberately crash the software and plunge into the monitor, change a few bytes here and there and off we go again.
I stand back from my drawing, (the object of my digitization), and ponder..... a few strokes in that region would improve the clarity, a less than deft smudge with the finger completely alters the tone in that area, etc, etc.

A few minutes later I have a picture of sorts, on disk. No, not a five and a quarter inch disk, but, with the help of the Super Serial Card, a bit of cable and a short program I wrote in Forth on the Mac, a three and a half inch **Macintosh** disk. The picture, of course, is reduced to various shades of grey.

Yes, I am fortunate that my husband and I both have the same consuming interest. (It consumes large amounts of mental energy, money and time.)
This has put me in the pleasant position of being able to sit working at the **Apple ][** while my husband sits at the desk next to me working on the **Macintosh**. In this house at least, the **Apple ][** and the Macintosh live together happily, complementing each other's activities. Of course this situation is not unique, many of my friends in **BASUG** are in a similarly fortunate position.
You may ask, 'Why keep both machines?'

I love our **Apple ][+**, which has a Rev 0 board upgraded to Rev 4. Oh, the joy of typing CALL-151 and being able to hack away at the code in a jiffy! Wish I could do it as easily on the **Macintosh**. But I equally enjoy the ease with which, on the **Macintosh**, I can plan out and print A4 size Science Worksheets for my pupils, entailing the use of text frequently interspersed with detailed labelled diagrams.

Yes, I'm lucky. I'm in a position to be enthusiastic and open-minded about both machines. I enthuse about their good qualities and try to be open-minded about their shortcomings. Would I be able to retain my open-mindedness if I had access to only one machine?

Many new **Macintosh** owners have joined **BASUG**. They own only one machine; a machine which attracted them, perhaps because of its ease of use, perhaps because they are 'knowledge workers' and saw its potential to ease their task of manipulating large documents of mixed text and graphics. There are also many **Apple ][c** and **][e** owners who have bought machines recently and are very committed to the machine of their choice, and what a fantastic range of software they have to choose from! However, **BASUG** has also had a smaller number of **Apple III** and **ITT2020** owners, as well as those of us who own rather elderly **Apple ][**'s, each with its own idiosyncrasies.

**I hope the majority will hold the bigots at bay and enable both machines to 'live together' amicably.**

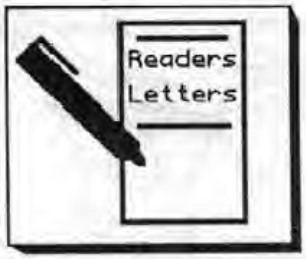
There seems to have been very little friction between owners of different machines within **BASUG** until the appearance of the **Macintosh.**
Members of one local group have told me that they are hardly allowed to mention the **Mac** at their meetings, are shouted at if they try to discuss mutual problems, and are criticised strongly if they try to organize self-help activities. But surely this is what local group meetings are for! The owner of any **Apple** machine should feel free to attend their local group and do precisely these things.

Of course **Apple ][** owners don't want **Mac** rammed down their throats ad nauseam, or vice versa. Surely the overwhelming majority of **BASUG** members are open-minded, intelligent human beings able to cooperate to their mutual advantage? I hope the majority will hold the bigots at bay and enable both machines to **'live together'** amicably.

I know I'm sticking my neck out, but I would welcome the views of members if they send them addressed to:

Norah Arnold,
P.O. Box 177,
St. Albans, AL2 2EG.

end




From G. Philipson, Barrow-in-Furness comes this little GEM:-

..... and enclose the alleged Professional standard that costs £3.25 per issue.

**Basugists**
My eye was also caught by the busy BASUG (British Apple System's User Group) stand, offering advice, encouragement and enthusiasm to all and sundry. We aim to have a closer look at these guys in the next issue but for now you might drop them an SAE and see what's on

Well HOT from the PRESS comes the fact that this so called Standard has gone to the proverbial WALL. Yes the Orchard Mag is no longer in exsistance. I tried to phone the Editor and was told sorry its gone. ED...

---

Longton,
Staffs

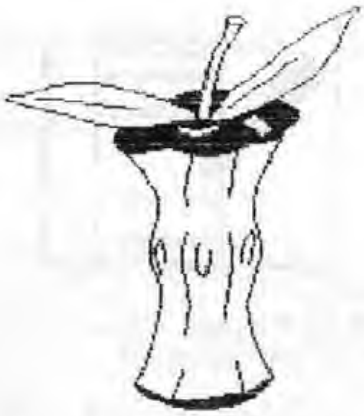
I like ALGOL very much and there is an excellent FREE version available under CP/M ALGOL-M (now available on BASUG CP/M disks).

This version of ALGOL allows strings to be used but the only string operations which appear to be available are string 1 = string 2 or string 1<>string 2.

Does anyone know the way of doing string manipulation under the ALGOL - M language ?

---

Mr Bernard Mantell from Winchester is interested in finding other Apple III owners who would like to contribute to a Special Interest Group. If you are interested then please contact him on : Home - [illegible] or at Work [illegible].
**COME ON ALL YOU III OWNERS.**



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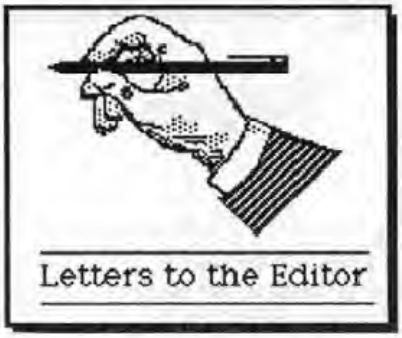
SPECIAL RELEASE SOFTWARE



# Letters to the Editor

## IN REPLY TO "MEMBER'S CORNER"

The last issue of 'Hardcore' must have been fairly confusing to most members who have not been aware of recent committee decisions.

The Editor's various comments were inevitable and restrained, although singularly biased, no doubt this issue will answer some of the questions which will have been raised in the editorial.

I am not aware of all the things that the committee have been up to since I resigned as chairman, but I do know that they are continuing to put an awful lot of their free time and efforts into making BASUG financially viable and, at the same time providing the membership with as good a service as possible within sensible budgets.

Many committee members, both past and present, have made heavy personal sacrifices in the pursuit of providing this service, not for any financial gain or personal accolade, put purely because they believe in the value of a keeping BASUG alive and striving to maintain the benefits of membership which were originally intended.

I have been a member of BASUG for a few years now and on the commitee for a fair proportion of that time so I know most of the whys and wherefores of our history as a limited company.

It was therefore with considerable disgust that I read the article, notably annoymous, which appeared under the heading of 'Member's Corner'. If this was written on my behalf as a member of BASUG then I wish no part of it any-way, but as most of the outpourings relate directly to events during both my membership of the BASUG committee and a spell as chairman then I feel that I must make this reply.

Taking the point of BASUG becomming a Limited Company the basic fact stated is true, who on earth would be prepared to underwrite potential liabilities of a trading group which was exceeding an annual turnover of £40,000 per annum?

I certainly wouldn't, at least not as volunteer committee member, and I would be surprised if any-one else would - included the author of the article.

There was also the significant factor of VAT registration, which was demanded by the Inland Revenue and resulted in the immediate requirement to prepare full trading details of previous years.

The simple fact was that the group had grown at an rate which far exceeded expectations - and resources. Paper work was minimal to say the least and the work involved by the committee of the time was enormous.

Professional accountants had to be engaged to piece together an acceptable audit for the Inland Revenue, and advised immediately that BASUG must become a Limited Company. However all this is history, and BASUG is still very much in business.

Rome wasn't built in a day and neither was the Group's accounting proceedures. The high accountant's fee reflects the condition of past year's paper work and it has taken much too long in commercial terms to rectify that, but it has been rectified.

The accounting system which BASUG now uses was built to the specification of the Company accountant's with the express aim of reducing the next audit fee to a bare minimum.

On the matter of breaching Company law in respect of the presentation of accounts then perhaps, in the strict letter of the law, that is correct. However, if the criteria for a group or club such as BASUG, is to concentrate on the finer points of Company law rather than to keep the group afloat and at the same time putting together systems like The Force, then I was obviously wasting my time along with all the other committee members.

As for the outpourings on the various subjects of workshops and meetings then it's true that these were reduced or didn't happen last year. One reason was the lack of response from potential attendees and another was a complete lack of volunteers to organise meetings, including - as far as I know - the author of the article.

It seems that the common story of British clubs is that if 10 or 12 people are daft enough to sit on the committee, out of 1000 plus members, then they can get on with it.

We were, and are, fighting to remain solvent and that meant that we had to look at all our activities and decide which should be supported and which could best be - however reluctantly - put on ice until we could put the cash behind it to make it worthwhile. This was precisely why we did not appear at any other computer shows but Apple '85. It was the show that we reckoned most of our members would be likely to attend and as we wanted to show ourselves to existing members and garner new Apple owners, who would also probably be at Apple '85, it seemed more logical to spent our time and your money there.

In previous years there wern't all that many makes of personal computer around so it was fair to assume that at PCW for instance there would be many of our members there. I don't think that's true now, most of the 'hobbyist' shows are dominated by BBC, Spectrum and many other makes of computer, particularly now that Apple have been penetrating the business community.

The Force was a major triumph for BASUG, others have copied the idea since, and perhaps even made a better job of it. I would be prepared to bet that their system on Gold cost their organisation 50 times the ammount that it cost BASUG. Remember also that dedicating paid staff to set up a sub-system on Gold is an entirely different prospect than two people doing it in whatever spare time they have.

Don't be too critical unless you are prepared to do better in your own spare time and largely at your own expense.

As I can no longer devote the time required to be an active committee member then I abdicate responsibility for the club to them with all my support.

If the author of the article cares to publish his or her name and subsequently volunteers to redress the areas of the Group's activity which fall below his/her exacting standards then I will have some respect for that person.

As it stands I see nothing more than criticism based on apparent prejudice, there are no suggestions for improvement and I am surprised that Peter Baron allowed his normal high standards to slip in allowing this form of annoymous article to waste a precious page of 'Hardcore'.

BASUG is a thriving and active club and, providing that the author of the "Member's Corner" is a lone voice in respect of his/her apparent attitude it will remain so.

If, however, this is a general feeling within the membership then I hope that clear directions and positive, constructive, criticism can be given to our committee without delay so that they can attend to them.

The committee cannot work within a vacuum, without support, guidance and loyalty from the membership, coupled with constructive criticism they can have no way of judging their decisions made on our behalf.

Quentin Reidford

# COURSE NEWS

Peter Dalton : 0732-62358

| Course Code | Machine | Title |
|---|---|---|
| BVM 01 | Apple II | **Spreadsheet design with Visicalc/Multiplan** For anyone with a little previous experience of spreadsheets (how to move around one and enter data?). |
| BVM 02 | Mac | **Multiplan on the Macintosh.** For those with no experience of the program. We hope to include a session with Excel if time permits. |
| BVM 03 | Apple II | **Appleworks.** A hands-on seminar for those who would like to be able to get the most out of this package. No previous knowledge is assumed. |
| BVM 04 | Mac | **Word processing and page presentation.** Intended to cover the main features of MacWrite and of Microsoft Word in particular, with a session on short cuts and common difficulties. Necessarily an intensive course so come prepared to work... |

| Course Code | Venue | Available dates |
|---|---|---|
| BVM 01 | London | Jan 25 / Mar 8 / Apr 19 / May 10 |
| BVM 02 | London | Jan 25 / Feb 8 / Mar 22 |
| BVM 03 | London | Feb 8 / Apr 5 |
| BVM 04 | London | Jan 18 / Mar 8 / Apr 5 / May 24 |

# BASUG COURSE BOOKING FORM

NAME _____

ADDRESS _____

_____

TEL NO: _____ FEE ENCLOSED : £25-00 (payable to BASUG)

COURSE CODE: _____ TITLE: _____

DATE (please give an alternative choice): 1st preference _____
2nd preference _____

RETURN THE SLIP TO: BASUG COURSES
4 HIGH STREET
CEMSING
SEVENOAKS
KENT TN15 6LZ

# SOFTWARE LIBRARY NEWS

The new CP/M disks added to the Library recently have been much in demand and we hope to further expand this area of the Library with at least a disk or two of new stuff for every edition of Hardcore. This month we have issued a new disk full of utilities, and a mailing list for DBase ][: more details below.

## USING CP/M SOFTWARE

Just a couple of points about the library CP/M disks. You obviously need a Z80 processor to run CP/M programs, for the ][ and //e this is achieved by buying a Z80 card which plugs into slot 4 (or 7), and for the //c there are a couple of alternatives available which either plug in the back or have to be fitted inside the case. Suitable cards are advertised by Peanut, Rosco, and Cirtech.

BASUG cannot supply disks with the CP/M operating system on them, since the CP/M system files can only be distributed under licence from Digital Research, unlike Apple DOS which is freely circulated. Therefore our disks will not boot, but it is a simple matter to add the system by copying from your master disk (you have got a master, haven't you?) using COPY B:=A:/S . To run Basic files under CP/M you will also need a copy of MBasic.

## DISK LIBRARY CATALOGUE

Yes you can pay for it, it costs £1.00, the price of the disk, and it has all the disks in the library - DOS, Eamon, Pascal and CP/M - listed in textfile format to be viewed on the screen or printed out either one at a time or in a sequence. We have included facilities to add new listings to the files as disks become available, and these will be published at intervals. If you want the catalogue for FREE just buy a disk from the library and it will be included on the back.

## SPECIAL OFFER * 10 disks for £45 *

A number of members buy their library disks in quantity, 8, 10, 15's and even one who bought 24! In future we will give you a special quantity offer - buy 10 or more disks and get one FREE, and we will send them in a FREE library case too, which simplifies the packaging.

## SOFTWARE CONTRIBUTIONS

We can always make use of good programs you have written to add to the library. If you have something original/ interesting/ un-copyrighted send it for consideration; anything from one-liners to complete programs.

## NEW RELEASES

### DISK D104

Includes a 'Personality Test', contributed by M.Green, which if you honestly answer the 50 questions asked will tell you what type of person you are and what your hang-ups are. Might confirm how perfect you are; but on the other hand .....
Also on the disk, contributions from Gary Busch, including DOS writer, Menu writer, X-Y graph plot, and several others.

### DISK C027

More useful utilities for CP/M users - master disk catalogue system, disk 'cleaner' (tidy up your disks), find bad sectors, etc

### DISK C028

Mailing list system which runs under DBASE ][ - menu driven, easy to use, and can be modified to your own format if you want to.

---

All Software Library disks are £5.00 and are purchased via the P.O.Box. Those wishing to pay by ACCESS may telephone their orders to Sheila on 0727 73045

# BASUG

## MACINTOSH SOFTWARE

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- [] Finder & Ramdisk
- [] Comms program
- [] MS Basic programs
- [] Macpaintings
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see order form for full list or get-

[] MacSIG Library disk

All Mac disks are £8.50

## APPLE ][ SOFTWARE

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|---|---|---|---|---|
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| [] | Eamon | E01 | to | E62 |
| [] | Pascal | P001 | to | P008 |
| [] | CP/M | C001 | to | C028 |

for more information buy the Library Catalogue for £1.00 or FREE with any library disk

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| MX/FX100 | £14.65 |
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| Case/keyboard | £ 4.50 |

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|---|---|
| Potentiometers (pair) | £ 7.60 |
| Blank C12 tapes (per 10) | £ 6.80 |

## MEMOREX DISKS

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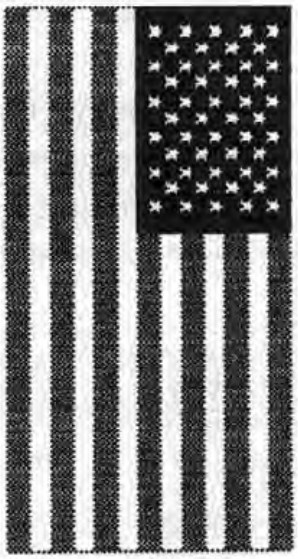
St. Albans
AL2 2EG

# MAC CHAT

December 1985

BASUG announce Mac Chat a new regular feature in your HARDCORE



**News - Views**

**Technical Bits**

**Quick Tips**

**Software Reviews**

**Latest Hardware**

**Special Offers**

# MAC SOFTWARE NEWS

Since the release of the new MacSig Disks 20 and 21 it has been brought to my attention by several people that there was no Disk Number 19, or if there was no one had been told about it, so to set the record straight, and to cover the slight omission on my part here are the details from the "Whats On the Disk" file of the missing MacSig Disk 19!

This disk was a bit of a milestone for BASUG, it was the first disk in the library created by contributions from the UK! (all the others disks have been from the USA), so keep up the good work!

**Whats New document**
This describes the update that Apple issued in May in the US which included the
Finder 4.1, Imagewriter Driver, MacWrite 4.2, and Paint 1.5.
The System update program described in the documentation is NOT included on this disk because
1) It is large
2) It seems to have a bug when installing the Imagewriter Driver. We await confirmation of this so in the meantime use the SfUpdate application to update your system files to allow Minifinder file selection by first and second letters. (If you have Macwrite and Mockwrite, typing MO will go to Mockwrite in the minifinder).

**"New DA/Font Mover" Folder.**
This contains the swish new Font and Desk Accessory Mover from Apple.

**Desk Accessories** included are:-
**Analyst** - A Business Calculator
**Art Thief** - Grab any MacPaint image for pasting into any Application.
**Delete File** - Plainly does what it says.
**Disk Info** - Ditto
**Extras** - Shows Memory free and delete files. Allows you to change default disks.
**Idle** - Blacks out the screen.
**Key Caps**- a new version with a pull down menu allowing Font selection.
**MockWrite/Print/Terminal** are all good Accessories that are sold on the Honor system.
**Reader** - Will read any text file.
**Saddle** - A graphics gizmo.
**Telegraph** - Morse Code, just type or paste in text.
**Transfer** - Lets you go straight to another application bypassing the Finder.
**Word Count** - A very fast word/line counter.

**"Old DA Mover" Folder.**
This folder contains the Desk Accessory Mover 1.4 just for convenience because the New Mover will not read the old DA Icons, so you would have to install an old one using the DAM 1.4 and the run the new DA/Font Mover to capture the DA in its own new file.

**View Paint** is a stand alone application that lets you peek at the top left of a Paint document.

**Catalog x Poms**
A Microsoft Basic program to catalog your disks. Sent to us by the Editor of the French Pom's Magazine.

**BCPL Folder**
This program should sooth you when you don't know what to do next. Written by Geoff Drake in BCPL - Included is the source code to help you get the gist of whats happening.

I am sorry this has been but a brief glimpse of whats on the disk, if you want to look further at any of the programs the disk is the standard £8.00 from Sheila.

Contributions to MacSig 23 continue to pour in, at the rate of a dripping tap! So if you have something useful contribute it!! I am trying to get together a disk with useful "Developers" Tools, Redit, Dialog Creators etc, so if you have any specific programs you would like to see (or dare I say it again contribute) drop me a line or a Disk to Geoff Drake, 16 Dean Drive, Stanmore, Middlesex, HA7 1HD or leave a message on the FORCE (BSG090).

**Happy Mac'ing**
**Geoff Drake.**

# MAC NEWS

Apple announce the Hard Disk 20 for the Macintosh 512k system. The Hard Disk 20 stores as much information as 50 Macintosh floppies.

The Hard Disk 20 is an external 3.5" Winchester that connects to the disk drive port on the back of the Macintosh and is designed to fit under the computer. The connecting cable is included with the drive as is the system software, filing system and owner's manual.

Most programs can be loaded directly onto the Hard Disk 20. Further advantages of the Hard Disk include a much larger scrapbook, the Macintosh accessory that stores frequently used text and graphic elements, in addition to the user's ability to store more fonts, and printer drivers.

Printer options available to Macintosh users are enhanced by the introduction of ImageWriter II, a second generation version of the ImageWriter of which sales have exceeded one million units.

The new ImageWriter II offers both NLQ printing and graphics capability, as well as design innovations that enable the user to customise it for special needs. Three printing modes are provided.

The ImageWriter II contains an expansion slot for accommodating a range of interface boards. Apple is developing the ImageWriter II AppleTalk option, which is a card for this slot that will provide shared ImageWriter II printing on an AppleTalk network of Macintosh computers.

P & P now supply the HyperDrive hard disk system for the Macintosh for around £2000.00, the 10Mbyte HyperDrive fits inside the 512k Macintosh without Apple voiding the warranty, people buying it have previously had to send their Macs off to the states to have the drive fitted but this service is now provided by P & P as well as authorised Apple dealers.

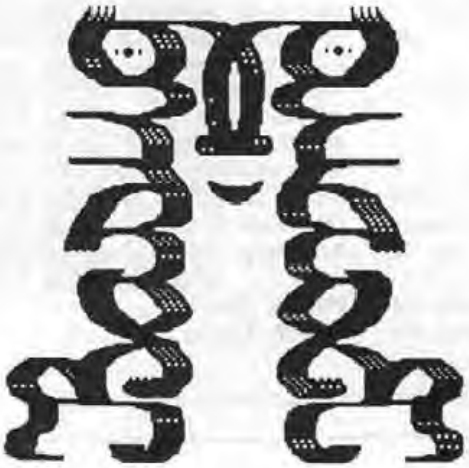
## Creating Custom Brush Shapes in MacPaint

By Philip Suh

While experimenting with the Resource Editor I discovered a way to modify the brush shapes and the spray pattern of the spray can.

MacPaint uses a special font called 12 to store all the brush shapes as well as the symbols used in MacPaint. Therefore, by modifying the font called 12, the brush shapes can be modified.

To start, copy MacPaint onto a blank disk. This is not necessary, but use it as a precautionary measure in case "something goes wrong". Get the Resource Editor program running. A small window will appear with the title of the disk and the names of the resource files on the disk.



If the copy of MacPaint you want to modify is on this disk, you are ready to go. Otherwise, eject this disk by either closing it from the File menu, or click the little box in the upper left hand corner of the window. A window with the name of the disk and files on it should appear.

Open MacPaint by double clicking on it. Another window with the title MacPaint will now be opened. This window will have the names of all the resource files in MacPaint. From this window, open the resource called FONT, once again, by double clicking.

When the FONT resource is opened, the names of all the fonts in that resource file are displayed in a window. In this particular case, only one font, "12", is present.

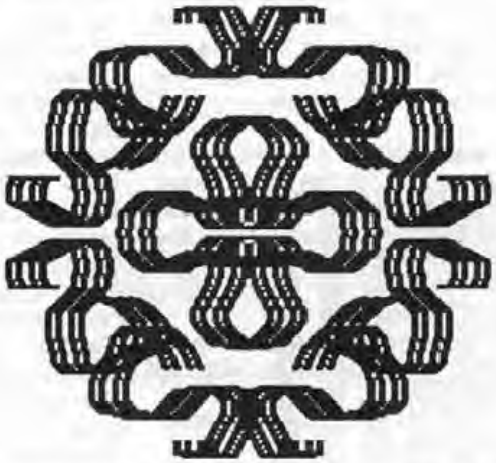
Later if you look at the System file and open the FONT resource in it, you will be able to see all the fonts that are presently installed on the System file. Double click on the font you want to view, in this case it will be 12.

This will take you into the Font Editor. This Font Editor is much easier to use, and more reliable than the program Font Editor which was circulated earlier.

The Font Editor works just like Fat Bits. The Fat Bits window shows you the current character you are working on.

The lower right hand window also shows the character and its ASCII value. The upper right hand window is a window for sample text. You can try out your newly created characters by clicking in this window and typing here.

To select a character, hold down the mouse button and drag the rectangle right or left beyond the window boundaries. This will scroll the characters rapidly in ascending ASCII order. To move the characters one by one, just click on the space to the right or left of the dotted rectangle.



Another way to select a character is to click in the rectangle, and then type a letter on the keyboard. Whatever character you type will be the next one selected. This works with the SHIFT and OPTION keys as well.

Be careful though, if you hit the BACKSPACE key, the character presently selected will be erased.

You can control the width of the character by holding the mouse button down and moving the triangles on the bottom of the window left or right.

Note, the height and width of a MacPaint character is limited to 16 pixels. You can make the characters wider, but only a 16 X 16 portion of it will be shown.

## London Mac Group

The London area now has a Mac Specific Group.

The group will hold informal meetings for the next few months until premises are found.
It is hoped that all interested members will phone Sheila Hirst on the BASUG phone to get the latest details.

**ASCII VALUES OF MACPAINT SYMBOLS:**

69-88 - MacPaint Symbols (lasso, eraser, paint bucket, etc.)

89-92 - Crosses for drawing straight lines and shapes.

93 - Mask for Paint Bucket.

106 - Pointing Finger.

107 - Mask for Pointing Finger.

109 - Mask for Hand.

110 - I-beam cursor for letters.

111 - Spray Pattern for Spray Can.

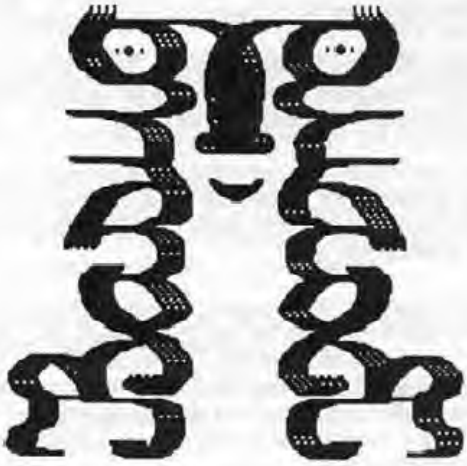
114 - Selecting cross-hair for selection rectangle.

116 - Mask for Pencil.

119 - Outline for Eraser (when on the drawing screen)

120 - Shape of Eraser and also big square brush.

120-151 - Brush Shapes.



It is important to note that after changing some symbols such as the grabber, paint bucket and pencil, you must also change the respective masks for these images.

To create masks, just copy the shape of the new symbol you created, and fill it in. If you make changes and decide that you do not like the changes that you made, there is a revert function in the File menu. I found, however, that this revert sometimes goes crazy and does strange things to your work. **Use it with caution.**

After you have made all of your changes, close the FONT 12 by clicking in the upper left box, or from the File menu. Likewise, close the FONT resource, and finally the MacPaint file. You will be asked if you want to save MacPaint. Click Yes.

This article was adapted from an article by Philip Suh first published in BMUG Newsletter, 1985.

The SWITCHER utility for the 512k Macintosh is the subject of more news from Apple. Switcher allows users to create their own integrated applications by combining up to eight programs in memory at the same time, dependent on the characteristics of each program. For example, the user can temporarily leave a MacProject document, send a message via MacTerminal, copy a graphic from a MacDraw file to a MacWrite document, and return to MacProject all without the bother of quitting one application and loading another.

The Macintosh Pages require articles from Members, we urgently need any technical items.

Switcher can remember specific sets of applications previously used together so they can be reloaded in a single step with a click of the mouse. The program creates an icon for each set of applications as if it were a single distinct, integrated program.
Microsoft have included a Switcher document with Excel that links Excel with Microsoft Word. The retail version of Switcher is called The Switcher Construction Kit, and includes an instruction manual. Switcher also runs on the Macintosh XL.

## Installing Copyprotected Software on a Hard Disk or RAM Disk.

by Reese M. Jones.

You may need to use some excellent software products that, unfortunately, are copy protected. The following procedures can be used to install most of the major copyprotected software products onto a hard disk or a RAM disk and will eliminate the need to insert your master signature disk each time you run the program or switch between programs.

These procedures can be performed by any legitimate owner of the software and will make the program much easier and faster to use when working with a hard disk.

Those of you who simply want to make the one archival backup copy of protected software that the copyright law permits will find it easier to use one of the many commercial programs marketed for that purpose (such as Copy II Mac from Central Point Software).

The author condemns the practice of software piracy. How would you feel if you had written a program and couldn't sell it because everyone already had it?

Every file on the disk has certain bits that tell the finder ( the Mac's disk operating system) information about the file. One of these bits determines whether or not the file's icon is visible on the desktop. Another determines whether or not the file can be copied by dragging its icon from one disk to another.

Many copyprotected programs look on the disk from which they were run for an additional "check file" that is both invisible and copyprotected.

Usually when you copy the program to another disk this check file gets left behind (because you can't see it and because it is copyprotected). However, you can move both the copyprotected program and the check file to a hard disk or RAM disk. This procedure involves three simple steps:

(1) Turn off the invisible and copy protected bits on the hidden file.

(2) Copy the application and the hidden file to the hard disk or RAM disk.

(3) Turn back on the invisible and copy protected bits on the hidden file.

**Using FEdit to Install the program on the Hard disk or RAM disk.**

You will need the program FEdit which is a fine freeware program. (The author hopes that you will have reimbursed the author of FEdit for all his work.)

Copy the FEdit program onto your hard disk (or system disk with the RAM disk on it).

Run FEdit by double clicking on it.

Select the Open File command from the File menu. Eject your system disk and insert your protected program's signature master disk (the one that came in the box).

Look through the minifinder list until you see a file that wasn't in any of the folders on the desktop. The file you are looking for is the "check file," an invisible, copyprotected file on the signature master disk that the program looks for when you start it up. When you find the file (there is usually only one such file), open it by double clicking on its name.

You will probably see the following message, but don't worry, proceed.....
"This file cannot be displayed because neither the data fork or resource fork have disk sectors allocated."

Select the File Finder Attributes option from the Display menu and a window will appear. You should un-set the Protected, Locked and Invisible bits by clicking in the associated boxes.

After un-setting the bits, select Change, then Close the file and Quit from the program. You should now be able to see the file that you just made visible on the desktop.

Copy this file, the main program and its associated files onto the hard disk or RAM disk. One note of caution here: DO NOT run the main program while the check file's Protected bit is not set because it will erase itself.

You must now reverse the process, using FEdit on the hard disk to re-set the Protected bit on the "check file." Use the Drive button in the minifinder dialog box to make sure you are accessing the check file on the hard disk. (With a RAM disk, FEdit must be copied onto the RAM disk along with the System file, the Finder (or microFinder), and the check file. Then run FEdit from the RAM disk.)

After you have opened the check file on the hard disk, re-set the Protected bit by clicking in the associated box, click on Change, choose Close and Quit.

You're done. You can now run the main program from the hard disk by double clicking on it. The program will no longer ask you to insert the master disk (because it finds its master check file on the hard disk and assumes that the hard disk is the master disk).

Continued on next page

**A Few Notes and Alternatives.**

This protection scheme is the one used by most of the major Mac programs. We have chosen not to list all the programs and their associated check file names because we believe that only legitimate owners of the software should be doing this.

The author does not condone or support software piracy: if you use a program and like it, you should buy it.

The Protected bit is usually the only one that needs to be re-set on the hard disk, but in some cases you will also need to re-set the Locked and Invisible bits.

Some programs also check to see if the check file is at the same coordinates on the desktop (the HLoc and VLoc settings). These settings are accessible using the Set File program. Record the HLoc and VLoc settings for the check file on your master disk so that you can place the check file in the same position on the hard disk desktop.

Some versions of the Set File program can be used for the whole procedure instead of using FEdit. Install the Set File program on your hard disk or RAM disk.

When you Open Set File and its window comes up, you may now change the Protected and other bits as well as the HLoc and VLoc settings for the file you selected. You may cancel your changes or set them, but the desktop will not be updated until you quit from an application program or update the desktop yourself by simultaneously holding down the Option and Command keys and double clicking on the Finder icon.

When using Set File to move protected software onto your hard disk (as described above using FEdit) you should install Set File on the hard disk (or install Set File on your RAM disk along with the System, Finder and program).

This article was adapted from an article by Reese M. Jones first published in BMUG Newsletter, 1985.

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**Snippets from the Mags.**

An indication of where you might find information on the Macintosh.

Practical Computing,
August 1985, v8 n8 p81.
An Interview with Bill Gates, founder and President of Microsoft.
By Glyn Moody.

'Macintosh and Excel together are superior to the IBM PC and 1-2-3..... and Excel is the world's greatest spreadsheet.'

Practical Computing,
August 1985, v8 n8 p93-94.
Apple Laserwriter, by Ian Stobie.

A favourable review of the Laserwriter.....'it has massive processing power and can itself become a more powerful computer than the Macintosh .....the excellent features are what account for the high price compared to other laser printers.'

Practical Computing,
August 1985, v8 n8 p77-79.
How to avoid the blues: Compatibility is not everything, by Glyn Moody.

'With so much software being written for the Macintosh, it is turning into an innovative and stylish machine that is also viable in a business context.'

Computer Graphics World,
September 1985, v8 n9 p49.
Sophisticated Page Makeup Gets Personal, by James Cavuoto.

Looks at PageMaker, ...'unquestionably the most powerful page-makeup program available for the Macintosh', also ReadySetGo, and MacPublisher.

Call-A.P.P.L.E.
October 1985, v8 n9 p39.
A Closer Look at Jazz, by Michael and Lisa Storrie-Lombardi.

'Lotus has done an amazing job utilizing the power and ease of the Macintosh.....error handling needs to improve.....copy protection needs removing.....At this point in Lisa/Mac evolution, for $595 we demand more.'

Call-A.P.P.L.E.
October 1985, v8 n10 p40.
Excel, the new King of Spreadsheets, by Richard P. Loggins.

'It's a number-crunching powerhouse that includes excellent graphics, an above average database, and macros that exceed those found in any other spreadsheet.....It's only real potential problem is exploring the tremendous number of options it provides.'

Byte,
September 1985, v10 n9 p311.
DB Master for the Macintosh.
By Jeffery M. Jacques.

'.....easy to use and has some nice features.....not copy-protected .....has the basic code to be a good file-management system, but.....'

# HOT LINE

The Hot Line number will be changed from 1st January 1986. Please make a note NOW!

Dave Ward on 08893-21992

This number replaces all previous ones

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**Advanced Micro Products Ltd.**

**The Diary has been omitted this issue - please inform the EDITOR of any items for inclusion in the Diary by the 5th January 1986 for inclusion in the February issue.**

# PRINTER SWITCHING DEVICES AND ACCESSORIES FOR APPLE IIC

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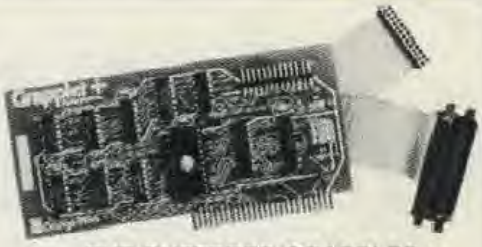

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The Grappler+ combines unique features like Double Hi Res graphics and mixed mode screen dumps to offer new dimensions of creativity. A dip switch allows the Grappler+ to become compatible with most any popular dot matrix parallel printer. A special transparency mode renders the Grappler invisible to your software.

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ORA 10

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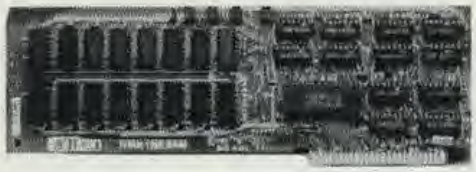

### 32K RAM BOARD

The original multi-bank memory board for Apple II. Plugs into any slot. No jumper cable. Low power consumption. Uses high reliability pretested 16K dynamic 200 ns RAM chips with 7-bit refresh.

Applications software is included. VisiCalc users can add 32K to the workspace memory with this board and the VC-Expand or VC-Expand/80 software. SAT 001

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A medium-range memory board which can be expanded to 128K as your needs increase. Includes all the features of our 128K board. Upgrading is simple: just plug in 8 chips.

SAT 002

### 128K RAM BOARD

VC Expand 80 software together with Saturn's 128K board and a Saturn 32K board, will give up to 177K for VisiCalc models, with an 80 column display on any of the 80 column boards mentioned. VC Expand 40 will give the same additional memory without 80 column display.

The Saturn 128K board was one of the original large memory boards and comes complete with software to allow program memory expansion APPLESOFT and disk emulation in APPLESOFT, PASCAL, and C/PM. (With other boards you often have to pay extra for these features – or they're not available at all!)

SAT 003

### VICOM ASC II/VIEWDATA

The VICOM communications software enhances the potential uses of Apple II+, IIe & IIc computers. It is an integrated package that allows a user to communicate with both view data systems like Prestel as well as with ASCII/text systems like Easylink, Telecom Gold, Comet and bulletin boards.

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VICOM has been tested and approved by leading modem manufacturers and information database system companies. It is the only software package that allows access to all major information systems on such a wide range of equipment.

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